HOW TO KNOW WHICH DEALS ARE REAL

Deceptive practices and dubious discounts make it harder to shop smart. This gift season, we expose gimmicks and share smart tactics so you never overpay.
Your Road Map to Easy Car Shopping

Looking to save money and avoid car-buying hassles? Get the deal you want with the Build & Buy Car Buying Service®. Buyers have seen an average savings of $3,101 off MSRP* from a nationwide dealer network.

SEARCH for the car you want and see what others paid

LOCATE the dealership from our prescreened network of over 15,000

COMPARE real pricing from participating dealers

SAVE and drive home your car and your savings!

Take a test drive at cr.org/buildandbuy

*Between 7/1/17 and 9/30/17, the average savings off MSRP presented by Participating Dealers to users of the Build & Buy Car Buying Service, based on users who configured virtual vehicles and who TrueCar identified as purchasing a new vehicle of the same make and model listed on the certificate from a Participating Dealer as of 10/31/2017, was $3,101, including applicable vehicle-specific manufacturer discounts. Your actual savings may vary based on multiple factors, including the vehicle you select, region, dealer, and applicable vehicle-specific manufacturer incentives, which are subject to change. The MSRP is determined by the manufacturer, and may not reflect the price at which vehicles are generally sold in the dealer’s trade area as not all vehicles are sold at MSRP. Each dealer sets its own pricing. Neither TrueCar nor Consumer Reports brokers, sells, or leases motor vehicles.
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**ACCOUNT INFORMATION**
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**RATINGS**
Overall Scores are based on a scale of 0 to 100. We rate products using these symbols:

- Poor
- Fair
- Good
- Very Good
- Excellent

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We are the world’s largest independent, nonprofit consumer-product-testing organization, based in Yonkers, N.Y. We survey hundreds of thousands of consumers about their experiences with products and services. We pay for all the products we rate. We don’t accept paid advertising. We don’t accept free test samples from manufacturers. We do not allow our name or content to be used for any promotional purposes.

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Go to CR.org/lettertoeditor.

**EMAIL SUBMISSIONS**
For Selling It send items to SellingIt@cro.consumer.org or call 800-333-0663. See page 67 for more details.
What’s on Your Mind?

We Want to Know.

Our goal is a fairer, safer, and healthier marketplace for everyone. Together we can get there faster. That’s why we want your input and feedback.

Join our Consumer Reports Insights Panel today. It’s the easy way to have your say.

Let’s start the conversation: cr.org/panel
Which Deals Are Real?

GROWING UP in a large family meant that finding real deals was always top of mind. Whether it was the clever “two for one” pitch or the magic words “final sale,” my parents bundled us up and off we went in search of the ultimate way to stretch our dollars. There was great pride in knowing that we were not just shopping—we were getting the best value at the best prices. Okay, so maybe that baseball mitt didn’t fit exactly right one year—but I’ve never lost my appetite for discounts or markdows.

Shopping today takes a little more know-how. From Black Friday sales to time-limited online offers, we are inundated with come-ons that promise big savings and tempt us to act quickly before deals run dry—so it’s no surprise that a rising number of lawsuits pushing back on dubious pricing are being pursued. Even when we suspect that these offers could be too good to be true, it can be hard to pass them up—and harder still to differentiate between a legitimately great value and a pricing trick that doesn’t really offer much.

This month, we break down how to expertly navigate the world of discount pricing. You’ll find guidance on recognizing deceptive offers, techniques for finding the best deals, and recommendations to help you make the most of the emerging world of online browser tools and phone apps. These useful tools can deliver instant cost comparisons, aggregate coupons, and alert you to price drops in real time. We’ll also take a deeper dive into one of the industries most beset by opaque and ever-shifting pricing—the airline industry. As you dive into one of the industries most beset by opaque pricing drops in real time. We’ll also take a deeper

Photo Editors Tammy Morton Fernandez, Ewelina Mrowiec, Lisa Slater, Michael Solita, Tracy Stora

From the President

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Alerting Consumers About Recalls

WHAT'S AT STAKE
Here's a statistic that should concern us all: The average rate at which consumers take action when a product they own is recalled for safety reasons is thought to be a mere 6 percent.

One reason, experts believe, is that most consumers who own a recalled product simply never hear about the recall.

And the reason for that? The system currently in place for alerting consumers about recalled products that they own is out of date and needs to be upgraded for the digital age.

HOW CR HAS YOUR BACK
CR helped lead a coalition of groups pushing for 2008's landmark Consumer Product Safety Improvement Act (CPSIA), which established an online product safety database and required manufacturers of certain products to give consumers registration cards and the ability to register online to be notified in case of a recall.

But those requirements aren't enough, which is why CR (with other groups) recently delivered recommendations to the Consumer Product Safety Commission. Among them: Instead of relying on the product registration forms of old, consumers should have the option, at the point of sale, to register their purchase and to receive text messages if the product is recalled. And companies that issue recalls on their products should have to provide incentives—such as extra features on a replacement or cash back—to encourage consumer participation.

WHAT YOU CAN DO
You can find select recalls in every issue of CR magazine; this month, see page 19.

You can also find a full list of our recommendations at CR.org/recalls; report and search for unsafe products at the CPSC website, saferproducts.gov; and find the latest recalls at cpsc.gov/recalls.

Making Baby Food Safer

WHAT'S AT STAKE
Because their bodies and organs are still developing, young children are especially vulnerable to serious health risks when exposed to toxins.

That's why it was so troubling when recent CR tests found that two-thirds of 50 baby and toddler foods we tested contained measurable levels of at least one toxic material known as a heavy metal, including cadmium, lead, and inorganic arsenic.

HOW CR HAS YOUR BACK
With the release of our report (in the October 2018 issue), we called on the U.S. Food and Drug Administration to do more to protect the public. Specifically, we urged the FDA to set a goal of eliminating cadmium, lead, and inorganic arsenic in baby and kids' food beyond the lowest amount measurable by current technologies. And we suggested the FDA set incremental targets for companies as they work toward reaching that goal.

In addition, we believe the FDA should, by the end of 2018, finalize its guidelines limiting inorganic arsenic in apple juice to 10 parts per billion (ppb) and limiting inorganic arsenic in infant rice cereal to 100 ppb. Last, it should revise existing guidelines for lead in fruit juice, from a limit of 50 ppb to 5 ppb, the standard for bottled water.

WHAT YOU CAN DO
Parents can limit their children's exposure by serving a variety of fruits, vegetables, and grains, and limiting intake of infant rice cereal, sweet potatoes, and packaged snacks.

CR.org/babyfood.

Helping Families Fly Together

WHAT'S AT STAKE
As the holiday travel season approaches, kids and their caregivers could find themselves separated on lengthy flights. To avoid this scenario, Congress passed a bipartisan law in July 2016 directing the U.S. Department of Transportation to "review and, if appropriate, establish a policy" ensuring that families traveling with kids 13 and under would be seated together at no additional cost.

Now, more than two years later, the DOT has determined that such a policy is not appropriate—but it has done so without soliciting public comments, calling for public hearings, or making any public statement on the matter.

Meanwhile, some U.S. airlines continue to charge fees or higher fares for passengers needing to sit together.

Beyond the financial penalty (see our story on other airline fees, on page 30), current policies pose other risks; a recent FBI report noted that sexual assaults aboard commercial flights are rising, and that the victims have included unaccompanied minors as young as 8 years old.

HOW CR HAS YOUR BACK
Under the Freedom of Information Act, CR has written to DOT Secretary Elaine Chao requesting all documents pertaining to the DOT's implementation of this policy.

WHAT YOU CAN DO
Contact your representatives at congress.gov and tell them to press the DOT to implement and enforce the law. And learn more about our What the Fee?! campaign at WhatTheFee.com.
Our October cover story, “What’s Really in Your Meat?” investigated the presence of trace amounts of banned drugs in meat and the potential health implications. To join the conversation, go to CR.org/meat1218.

THANK YOU for the fascinating article. I number among the thousands of individual or family beef producers in the U.S. who care deeply about their land, animals, and consumer products. The conclusion of the article rightly states that the USDA Organic label is not a guarantee of the quality of your food. Getting to know and supporting your local farmer through CSAs [community-supported agriculture farms], farmers markets, or buying directly from a producer is a fantastic way to ensure that you are consuming an animal that was raised with conscience and pride in high standards. After all, it is what we serve our own families.

—Rita Gysin, Mountain View, MO

THANKS SO MUCH for the article about drugs detected in animals ending up on consumers’ plates. I appreciate CR looking out for its readers’ health! Our regulatory agencies are failing us and endangering public safety when they don’t enforce the laws and regulations governing the agricultural industry. We need to demand change and expect it. But it will likely be a long time before we see any reform. The other solution is to avoid or reduce our consumption of animal-based foods, and consider alternatives, such as a plant-based diet, which is easy to transition toward with all of today’s varied products and the information available.

—Annoula Wylderich, Las Vegas

IN YOUR REPORT, “What’s Really in Your Meat?” I was intrigued but sorely disappointed. You mentioned something in the way of insufficient data that prevented naming the products with a higher content of drugs, and I can understand your discomfort. But you have made your discomfort ours. What I buy your magazine for is to determine what products by brand name are good, safe, and useful. You’ve provided a tantalizing glimpse into bad practice in the meat industry but left your readers woefully insufficient information about what brands are good or bad, as you customarily do.

—J. Potter, Slate Hill, NY

YOUR VERY INSIGHTFUL article reminds me of an incident when I was a child. I asked my beloved (and very religious) grandmother whether a certain food item was kosher. She told me that if you have to ask, then it isn’t. That apparently is your attitude about questionable substances in meat, and I could not agree more.

—Eli Kaminsky, via email

THE ARTICLES TITLED “What’s Really in Your Meat?” and “Hidden Health Risks From Heavy Metals” exhibit the same flawed reasoning. Fact A: Certain drugs and heavy metals have been detected in foods at trace concentrations. Fact B: These drugs and heavy metals can be hazardous to humans at higher concentrations. Implied conclusion C: These drugs and heavy metals pose threats to human health at the observed trace concentrations. Many substances that are normally present in food, water, or air would be harmful at high concentrations but are harmless to human health in trace concentrations. The meat article doesn’t present evidence of any risk of cancer or fetal harm from the low-level drug contaminations observed. Likewise, the heavy metal article never provides evidence for risks from heavy metals at the concentrations measured. For example, rice, despite its arsenic content, has been consumed daily by millions of people from infancy to old age without apparent adverse consequences.

—Edwin P. Ewing Jr., M.D., Atlanta

EDITOR’S NOTE: The government says none of the drugs CR focused on in our article are allowed in meat at any level. In some cases, that’s because even trace amounts are linked to human harm. For example, chloramphenicol is banned in food animals because any exposure can cause aplastic anemia in 1 in 10,000 people. And in cases where the risk of exposure is not yet clear, that’s partly because little research has been done to investigate. That’s why CR has called on the Department of Agriculture to
study the potential long-term risks. And in our article on heavy metals, 15 of the 50 baby foods we tested pose a potential health risk, including developmental harm, to a child who consumes just one serving or less per day. That assessment is based on our test results and comprehensive analysis of medical literature, as well as data from the Centers for Disease Control and Prevention. Consumer Reports continues to investigate this issue.

YOUR ARTICLE, as informative as it was, left many questions unanswered that I know CR will continue to delve into. As your previous article on the safety of shrimp has put trepidation into my visits to buffets, this recent one has put a similar fear into most of what I eat. Keep up the good work.

—Bill Taglia (future vegetarian), Southington, CT

Shopping for Safety

I actually laughed out loud reading Kevin Doyle’s “Sticker Shock,” about car trim-level confusion, in the October 2018 issue. I purchased a 2018 Subaru Crosstrek mainly for the safety features. Of course I had to get the “Limited” trim. I couldn’t agree more that safety features should be standard.

—Joan Peebles, West Chester, PA

THIS IS THE FIRST TIME I have written to CR, but I just had to comment. Kevin Doyle not only provided us with valuable car-buying information, but he included humor that I’ve never seen before in the magazine. Well done!

—Terry Benson, Redondo Beach, CA

I JUST FINISHED reading “Sticker Shock.” I really wanted to purchase a 2018 Subaru Forester. However, after visiting a dealership, I was amazed at the cost of the Forester with the safety features that I needed. So I purchased a 2018 Toyota RAV4 XLE with the same safety features I wanted at a much lower cost. I am truly happy with my RAV4 and spent a few thousand dollars less.

—Vernell Smith, Cleveland Heights, OH

For decades, I had good outcomes when using CR in my selection of a highly reliable vehicle. Kevin Doyle shares how challenging it can be lately to select a trim level. My most recent experience produced good results when I did a few test drives and then fine-tuned my choices. Then I used the buying service at my local credit union, which found the exact features I wanted at a significant savings. They had it transported 200 miles to me at no added cost.

—Scott Smith-Cooke, San Luis Obispo, CA

Protecting Our Privacy

“Make Your Home a Little Smarter” (October 2018) is informative but leaves out some crucial information. What about security? How vulnerable to hacking is each device? What steps can consumers take to (a) protect their home network from intrusion and (b) prevent unauthorized uses? Please publish a follow-up rating the devices by these criteria. I am reluctant to buy any “smart home” device without this information.

—W. Meacham, Austin, TX

EDITOR’S NOTE “CR takes consumer data privacy and security very seriously,” says Robert Richter, who heads up our privacy testing program. Last year we unveiled the Digital Standard to provide a benchmark for how products should safeguard consumer data, and we’ve already begun incorporating its principles into our testing program, Richter adds. (You can read more about our standard at CR.org/privacy1218.) Earlier this year, we published our first privacy and security results for smart televisions (May 2018 issue) and peer-to-peer payment apps (CR.org/peer1218). We’re working to expand that program across more product categories. This requires establishing new testing protocols that meet the rigorous standards we use in other aspects of our testing. We will be keeping all our members updated.

Storm Safety

In your article “Safety From the Storm” (October 2018), your sidebar about keeping important documents and cash in a “go bag” by the door is okay if you’re home when the disaster happens. What do you do if not? Most of us now always carry smartphones with lots of storage capacity. I suggest using your phone to photograph important documents or scanning and storing them digitally.

—Franklin Borkat, La Mesa, CA

THE LESSON in all this, as I understand it, is to avoid building in zones highly susceptible to wildfires and flooding (that’s why they’re called “flood zones”). But if local authorities, bending to local pressures, allow development to proceed, then casualty insurance premiums should rise to appropriate levels. I see no reason why my insurance in Minnesota should subsidize underpriced and inappropriate casualty insurance coverage for structures erected in high-hazard areas elsewhere.

—John S. Adams, Minneapolis
What We’re Testing in Our Labs ...

In our 63 labs, we continually review and rate products. Here, timely picks for this month.

**Single Wall Ovens**

**WE TESTED:** 29 electric models  
**WE TEST FOR:** Evenness of cookies and cakes baked on multiple racks, evenness of browning and searing a tray of burgers in the broiler, oven capacity, and more.

**Best for Baking**  
GE Café CT9070SHSS (with French door)  
$3,600

**High Owner Satisfaction**  
KitchenAid KOSE500ESS  
$2,300

**Broiling Bargain**  
Whirlpool WOS51EC0AS  
$900

**ABOUT THE SCORES:**  
Median: 74  
Range: 50–89

**Quiet Vacuums**

**WE TESTED:** 94 models  
**WE TEST FOR:** Noise levels, how much embedded talc and sand a model can lift from a medium-pile carpet, handling, and more.

**Bagless Upright**  
Shark Rotator Powered Lift-Away Speed NV680  
$260

**Bagged Canister**  
Miele Complete C3 Alize  
$650

**Bagless Canister**  
Dyson Ball Multi Floor  
$300

**ABOUT THE SCORES:**  
**Canister**  
Median: 53  
Range: 41-75

**Upright**  
Median: 58  
Range: 33-74

**Overall Scores:**  
Bagless Upright: **65**  
Bagged Canister: **63**  
Bagless Canister: **51**

---

Ask Our Experts

**Is there a downside to buying a full-sized desktop instead of an all-in-one model?**

A FULL-SIZED DESKTOP computer, though bulkier than a sleek all-in-one model, can offer similar performance for less money—especially if you already own a monitor. Even if you do need to buy a new monitor (adding a few hundred dollars to your outlay), your total cost may still be lower than for an equivalent all-in-one computer. (Compare, say, the cost of the HP Pavilion model, right, with the HP all-in-one next to it.) “Just look for a resolution of at least 1920x1080—regardless of what screen size or brand you prefer,” advises Antonette Asedillo, CR’s lead computer tester. Full-sized computers are also easier to upgrade and repair than all-in-one models. Still, for compactness and convenience, an all-in-one is hard to beat.
### Mirrorless Cameras

**WE TESTED:** 50 models  
**WE TEST FOR:** Image quality on auto and manual modes, video quality in regular and low light, quality of flash photos, LCD display quality, ease of use, and more.

**About the Scores:**  
Median: 70  
Range: 54-81

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Superior Snap FujiFilm X-Pro2 w/XF 23mm</td>
<td>$2,300</td>
</tr>
<tr>
<td>Best for Video &amp; Battery Life Sony Alpha A7R III w/FE 85mm</td>
<td>$3,600</td>
</tr>
<tr>
<td>Lightweight Money Saver Canon EOS M100 w/15-45mm IS STM</td>
<td>$450</td>
</tr>
</tbody>
</table>

### Chest Freezers

**WE TESTED:** 22 models  
**WE TEST FOR:** Temperature uniformity, thermostat control, energy efficiency, usable capacity, and how well a model stays cold during a power outage.

**About the Scores:**  
Median: 78  
Range: 14-91

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best &amp; Largest Capacity GE FCM22DLWW</td>
<td>$765</td>
</tr>
<tr>
<td>Terrific for Tight Spaces Frigidaire FFFC05M1TW</td>
<td>$260</td>
</tr>
<tr>
<td>Stone-Cold Bargain Insignia NS-CZ70WH6</td>
<td>$170</td>
</tr>
</tbody>
</table>

### Car Batteries

**WE TESTED:** 11 group 65 models*  
**WE TEST FOR:** Battery life (how a battery endures repeated charge and discharge cycles), how long it can run a car, and more.

**About the Scores:**  
Median: 84  
Range: 57-91

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best of the Bunch Super Start Platinum AGM 6SPLIT</td>
<td>$190</td>
</tr>
<tr>
<td>Long Warranty (48 Months) Interstate MT7-65</td>
<td>$280</td>
</tr>
<tr>
<td>A Deal for Warm Climates EverStart Maxx-65S (South)</td>
<td>$95</td>
</tr>
</tbody>
</table>

### Desktop Computers

**WE TESTED:** 39 models  
**WE TEST FOR:** A desktop’s performance, versatility (including hardware and software), ergonomics, quality of display, and more.

**About the Scores:**  
All-in-One Median: 69  
Range: 35-93  
Full-Sized Median: 72  
Range: 68-87

<table>
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<th>Model</th>
<th>Price</th>
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</thead>
<tbody>
<tr>
<td>Full-Sized Desktop Deal (Monitor Not Included) HP Pavilion 959-p0084</td>
<td>$750</td>
</tr>
<tr>
<td>Most Versatile All-in-One HP 34B010</td>
<td>$2,000</td>
</tr>
<tr>
<td>Nicely Priced All-in-One Lenovo 730S-24IKB</td>
<td>$950</td>
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**Note:** We rate different products according to different testing protocols; as a result, Overall Scores of one product category are not comparable with another. *Different cars require different group-size batteries.
It's cold out there! Can I get a remote starter for my car if it didn't come with one?

If your car was built after 2005, chances are good that you can buy a compatible remote starter that lets you start your car from a distance, thawing window ice and making the inside toasty warm. “Your safest bet is to get a system from your car’s manufacturer,” says John Ibbotson, chief mechanic at CR’s Auto Test Center. Your local dealer can usually provide one.

Cars built before 2005 probably need an aftermarket starter, Ibbotson says. “Have it professionally installed at a national chain or reputable local shop, and get some level of warranty on the work.”

Aftermarket remote starters usually cost from $200 to $330 (including parts and labor), but systems for European cars may cost up to $800. Aftermarket remote starters can be fitted to cars with manual transmissions, but CR advises against it—the car could potentially be started while left in gear instead of Neutral, which is a safety hazard. Never remote start a car in an enclosed area, such as a garage; carbon monoxide poisoning is a deadly risk.

How can I tell if my old incandescent string lights are safe to use this holiday?

First, check that the wiring on your incandescent string light set isn’t broken or frayed, and is still flexible. “Brittle or exposed wire indicates that the set is past its prime and potentially unsafe to use,” says John Banta, a CR test engineer. If the wire is pliable, plug in the strand to test the bulbs. If a few bulbs are out and you have the original spares, it’s safe to replace them. Properly working incandescents will feel warm, which is fine for your tree. But don’t link too many strings together because this can cause a power overload.

If you’re replacing strings, choose LED lights. Even though LED lights might be more expensive, they last longer, can be brighter, and use less energy. Plus, LED bulbs are usually plastic, and therefore won’t shatter like glass incandescent bulbs. Whether LED or incandescent, always look for the UL seal (the standard for safety) on any box of lights you buy, and turn them off before you go to bed.

One last safety tip: Between 2014 and 2017, 27 percent of emergency room visits were related to falling off a ladder while putting up holiday string lights. So exercise increased caution if you must string your lights high up, advises Don Huber, safety expert for CR.

Are e-gift cards secure?

Physical cards for specific merchants and services are widely available at stores, but before buying one, always inspect a card’s protective stickers or coating for tampering and check whether the PIN has been revealed, says CR senior money editor Tobie Stanger. “Scammers can copy gift-card codes while they’re on the rack and later steal the funds you load on them,” she says. Some issuers will replace a lost or stolen gift card if proof of purchase and the card ID number are provided, so give the receipt along with the card.

You can also opt for reloadable prepaid cards. “These are attractive because you can use them wherever merchants take the debit cards of the issuer—such as American Express or Visa,” Stanger says. If fraud occurs, many issuers limit your liability to $50 if you report the unauthorized use within two days. A few issuers won’t make you pay anything.

With e-gift cards, your recipient gets a redeemable code via email, text, or social media. The e-card may be printable or designed only for a smartphone. Some allow redemption only online, not in a physical location. Keep in mind that you typically supply a lot of identifiers for yourself and your recipient. Though this makes it easier for e-gifts to be replaced if, say, the recipient loses the redemption code, it’s not without risk. “Consumers are at the mercy of the companies they purchase from to secure their data,” says Shirley Inscoe, a senior analyst at the Aite Group, a financial research and consulting company. So alert the recipient ahead of time and confirm that the e-gift arrived, and remind him to change passwords often to thwart fraudsters.
A GOOD FOOD PROCESSOR can speed up your prep time for almost any meal. “You can use a processor to purée soups and sauces, whip up nut butters, and with some, you can even make dough,” says CR test engineer Cindy Fisher. “Even experienced home cooks, who often prefer to slice and dice by hand, still find plenty of uses for their food processor.” Plus, they’re an excellent tool when you need to prepare large batches of food for holiday guests.

But the sheer variety of fancy features and high prices that come with these culinary appliances will give you lots to chew on. It’s best to decide first on the size you want, Fisher advises. Take into account how many people you tend to cook for, and what your storage and counter space can accommodate. Then evaluate the features you want, keeping in mind how often and how hard your food processor will be pressed into service. For example, if you like to make salsas, you might opt for a model that’s great at chopping, perhaps with a wide feed tube to save you the trouble of cutting up larger veggies.

FIT FOR FOODIES

- **16-cup Breville Sous Chef BFP800XL/A** $400

- **12-cup Cuisinart Elite Collection 2.0 FP-12BCN** $200

EXCELLENT VALUE

- **Oster Pro 1200 Plus Food Processor Attachment BLSTMB-CBF0-000** $90

Though small at only 5 cups, this is a sturdy pick with great chopping and dicing features, as well as excellent grating. Plus, it comes with a very good blender attachment and costs hundreds less than some other models.

In the Know

Food Processors

For more highly rated small kitchen appliances, turn to page 14.
CR Insights

Product Spotlight

Kitchen Gift Ideas for $50 & Under

1. Bella Pro Series KT-3431 (90062) toaster $50
   90

   This mighty mini toaster excelled in all of our tests, and even offers a “gluten-free” setting to toast denser gluten-free breads at a lower temperature for longer.

2. Hamilton Beach 12-cup Programmable 49468R coffee maker $25
   82

   A great idea for the coffee lover in your life, this reliable brewer is easy to use and takes cone-type filters. Plus, the warming plate will keep coffee hot for 2 hours after brewing.

3. Cuisinart Smart Stick CSB-75 blender $35
   76

   Excellent at puréeing vegetables for soup, this drawer-sized gadget is also very good at blending yogurt. The Smart Stick also comes with a three-year warranty—better than most we tested.

4. Hamilton Beach 6-slice 31411 toaster oven $50
   64

   Not only great for toast, this small appliance is also adept at reheating lasagna and baking muffins and cookies—all for hundreds less than many of the other toaster ovens recommended by our testers.

5. Black+Decker 3-in-1 Digital PowerCrush BL1350DP-P blender $50
   63

   Affordable, durable, and compact, this 492-watt blender is a great gift for anyone who enjoys smoothies. It also comes with an 18-ounce personal blender attachment, which received an Overall Score of 80 in our tests.

CR Time Traveler COMPUTERS

1973 Xerox PARC prototypes the Alto—the world’s first personal computer (left).

1983 In our debut tests, CR reviews the $1,600 Kaypro II, which folds up into a 25-pound box for commuting.

1985 We test this new Apple Macintosh (above), $2,195, and report that it “boldly simplified the keyboard, replacing most function and special keys with a pointing device called a ‘mouse.’”

1991 We report that the IBM PS/1’s high-resolution color display (below) is excellent and that its Microsoft Works software “is easy enough to use,” but there’s still a steep learning curve for beginners.

PHOTOS, TOP: JOHN WALSH/CONSUMER REPORTS; BOTTOM ROW, LEFT TO RIGHT: XEROX; CONSUMER REPORTS
How to Clean Practically Anything™

Your Microwave

MOST OF US rely on our microwave oven daily, zapping everything from hot cocoa to last night’s leftovers, so it’s no surprise how quickly it can become dirty with splatter and food bits. But a deep clean every so often can keep your microwave humming and odor-free, especially around the holidays, when it’s likely to work overtime.

REMOVE STAINS
Wipe the inner walls, ceiling, and floor of the oven with a hot, damp cloth. Wash removable parts, such as the turntable, in a dishwasher (if it’s safe) or with hot water and dishwashing liquid. For over-the-range units, be sure to wash the filters underneath.

CHASE AWAY SMELLS
To banish odors, place a bowl of water containing ⅛ cup of lemon juice in the oven and run it on high for 1 to 2 minutes. Wait 30 seconds, then remove the bowl and wipe the cavity, using the lemon water condensation to clean it. Then wipe it down with plain water and repeat if needed.

SCRAPE IT CLEAN
If you have stubborn stains or bits of food baked onto the interior, try scraping them with a plastic credit card—but never use it to scrape the inner surface of the microwave’s window. A scratch there could damage the microwave-blocking finish.

POLISH IT OFF
Finish up by making the exterior of your oven shine. Simply use a mild all-purpose cleaner and a soft cloth.

Cuisinart Mini Prep Plus DLC-2A food chopper
$40

This petite 3-cup chopper combines very good value with solid performance. It was particularly zippy at chopping onions and almonds in our tests, and at grating Parmesan cheese.

LG NeoChef LMC1275SB $160

For microwave safety tips and ratings, turn to our article starting on page 20.

CR reports that the 13-inch Sony Vaio VGN (below) “gives the MacBook a run for its money,” with comparable performance and 6½ hours of battery life. It weighs just 4.7 pounds and costs $100 less than the MacBook.

LENovo yoga 720-15IKB $950

OVERALL SCORE
73

For more laptop ratings, turn to page 46.

DECEMBER 2018

PHOTOS, TOP: JOHN WALSH/CONSUMER REPORTS; BOTTOM ROW, LEFT TO RIGHT: XEROX; CONSUMER REPORTS

DECEMBER 2018

CR.ORG 15
WITH SEVERAL TYPES to choose from—ionization, photoelectric, dual-sensor, and more—shopping for smoke detectors isn’t as straightforward as you might hope. Part of the reason is that fires can burn differently: some flare, others smolder. And different types of smoke detectors are more sensitive to one type or the other. Unfortunately, not all detectors can adequately detect both fire types, so we recommend using either dual-sensor smoke alarms or a combination of units to ensure the best protection.

**Dual-Sensor** These units, such as the First Alert 3120B that we recommend below, excel at detecting both types of fire and are the most effective smoke alarms in our tests.

**Ionization** This type of smoke detector is best at detecting the small particles typical of fast, flaming fires. It works by detecting charged smoke particles from the flame, which triggers the alarm, according to the National Fire Protection Association (NFPA). Ionization smoke detectors are particularly sensitive to burnt food and steam, so to prevent false alarms, avoid mounting this type of detector near the kitchen or bathroom.

But don’t rely on these units alone: In our tests, ionization detectors such as the Kidde (below) were excellent at detecting flaring fires but unable to detect smoky, smoldering fires adequately. So you’ll need to buy photoelectric models, too.

**Photoelectric** Best at detecting smoky, smoldering fires, photoelectric smoke detectors use an LED light beam inside the detector’s inner chamber. When rising smoke particles interrupt or scatter the beam, the NFPA explains, it then triggers the alarm.

In our tests, photoelectric detectors such as the First Alert (below), though excellent at detecting smoldering fires, were poor at flaming fires—so pair them with ionization models.

**Combination and Smart** Some units, such as the Nest model (above), detect carbon monoxide as well as smoke, saving you the step of buying additional CO monitors. The Nest is also smart, meaning it can send detection and low-battery alerts to your phone. But you can also make your regular smoke alarm smarter by adding a smoke alarm listening device, such as the $100 Leeo Smart Alert or $70 Kidde RemoteLync Monitor, which alerts you when detectors go off. Or try the $35 Roost Smart Battery, which you can put inside any conventional detector that uses a 9-volt battery, to upgrade it with an internet connection and get alerts.
Food Sleuth

How Healthy Is Oil?

The cooking oils section of the grocery store has more and more options—coconut, corn, hemp, olive, walnut, to name a few—and all have roughly 120 calories and 14 grams of fat per tablespoon. But the type of fats that make up these oils can vary dramatically. Both monounsaturated and polyunsaturated fats—which make up the majority of the fats in most nut, seed, and plant oils—have been linked to a lower risk of obesity, cardiovascular disease, and stroke. They’re especially helpful when used in place of unhealthy saturated fats, found in significant amounts in butter and coconut oil. But the type of cooking you’re planning matters, too.

High-heat cooking requires an oil with a high smoke point (the temperature at which the oil begins to burn). And for some dishes you want a neutral or mild flavor, while others call for a specific taste. With this in mind, here are five common oils to help you find the best fit.

Avocado Oil

TASTE Pressed from the flesh instead of the seed, avocado oil has a mild, nutty, and buttery flavor.

BEST USES This oil has a high smoke point, which makes it a good fit for a variety of cooking methods, such as sautéing and searing, but not for deep frying. If you find that olive oil is too strong a flavor for you, avocado oil is a good option with similar fat content.

Canola Oil

TASTE Made from the seed of the canola plant (a variety of rapeseed), it has a neutral flavor, similar to vegetable oil.

BEST USES Try it in dishes where you want other flavors to stand out, such as in baked goods, or on delicate fresh fish. It’s good for medium- to high-heat cooking. Most canola oil comes from GMO plants; if that’s a concern, choose organic or non-GMO verified oils.

Olive Oil

TASTE Olive oil can taste of fresh-cut grass, herbs, nuts, butter, or fruit. Some oils have a sharp, peppery bite or slight bitterness. “Extra virgin” bottles have the boldest flavor.

BEST USES Though pricey, extra virgin is great as a dip or in salad dressing. Drizzle over bean, grain, or pasta dishes. Use virgin, light, and just plain olive oil for sautéing veggies or meat.

Safflower Oil

TASTE Derived from the seeds of the safflower plant, unrefined oils are a dark yellow-orange and have a mild nutty, earthy flavor. Refined oils are typically pale and more neutral in taste.

BEST USES Its unassuming taste and high smoke point make it perfect for a variety of dishes and cooking, such as for baked goods, curries, and stir-fries, as well as sautéing and deep frying.

Coconut Oil

TASTE Extracted from the flesh of coconuts, this tropical oil has a mild, sweet coconut flavor.

BEST USES Refined versions of coconut oil have very high smoke points, so they’re good for frying recipes or in Asian dishes, such as curries. It’s almost all heart-unhealthy saturated fat, though, so it’s best to use this type of oil in moderation.

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<th>OIL</th>
<th>MONOUNSATURATED</th>
<th>POLYUNSATURATED</th>
<th>SATURATED</th>
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<tr>
<td>Avocado Oil</td>
<td>71%</td>
<td>3%</td>
<td>12%</td>
</tr>
<tr>
<td>Canola Oil</td>
<td>63%</td>
<td>11%</td>
<td>7%</td>
</tr>
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<td>73%</td>
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<td>14%</td>
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<td>Safflower Oil</td>
<td>75%</td>
<td>6%</td>
<td>8%</td>
</tr>
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<td>6%</td>
<td>2%</td>
<td>82%</td>
</tr>
</tbody>
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*Unrefined versions of safflower oil have a different breakdown of fats: monounsaturated (34%), polyunsaturated (75%), and saturated (6%).

Note: Percentages do not add up to 100 because we did not include some minor constituents.
**CR Insights**

**Do More With ...**

**Your Phablet**

BIGGER IS BETTER, right? That seems to be the thinking on everything these days, from houses to burgers—and now smartphones.

Phablets—an industry term CR defines for phones with a 5.5-inch screen or larger (measured diagonally)—are a growing trend among consumers. Industry analyst IDC says global sales of smartphones with displays of 5.5 inches and larger jumped 51 percent to 941.6 million units this year. That equates to nearly 65 percent of all smartphones sold.

Phablets are probably on the rise because more people are using their phones to watch TV, share photos, and multitask by running more than one application at a time—all activities that benefit from ample screen space. The drawbacks, however, are that bigger screens tend to be a little less durable in our drop tests and might not fit easily into your pocket.

Currently, the largest phone screen we’ve tested is the iPhone XS Max, introduced by Apple in September. This new iPhone, which performed well in our lab tests, features a 6.5-inch screen and is Apple’s largest phone screen to date. That’s not far off from some of the smallest tablets we test, which have 6.9-inch screens, though the largest tablets we test, at almost 13 inches, are still double the size of most phablets.

Interested in going big? These are some of the best-scoring phablets in our tests—models that combine clever features and top-notch performance with giant screens, at a range of prices.

---

**Samsung Galaxy Note9 $1,000**
**Screen size:** 6.4"  **83**

With its large rectangular shape and handy stylus, this is the most tablet-like phone we’ve tested. You can use the built-in stylus to write notes or doodle on its sharp display.

---

**Apple iPhone XS Max $1,100**
**Screen size:** 6.5"  **82**

The XS Max’s screen is more than a half-inch larger than the one on its predecessor, the X. Second overall in our ratings, the Max also has the highest-rated camera we’ve tested yet.

---

**Huawei Mate 10 Pro $550**
**Screen size:** 6"  **78**

This phone scores big points for its beautiful OLED display, which is taller and skinnier than many models, so it’s easier to hold. Plus, it comes with a plastic case for extra protection.

---

**LG V35 ThinQ $900**
**Screen size:** 6"  **77**

A good all-around performer for phablet fans, the V35 got top marks for battery life, lasting 27 hours—a significant stretch longer than other LG phablets we’ve tested.

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**WHAT 100 CALORIES LOOKS LIKE**

**Holiday Cookies**

Between cookie swaps and holiday parties, it’s a small wonder we don’t all sport Santa-sized bellies this time of year. But being aware of calories and portion size can help you win the battle of the bulge, says Amy Keating, R.D., a CR dietitian. Use our guide, and go to [CR.org/cookie1218](http://CR.org/cookie1218) for more.
Ford is recalling about 2 million 2015-18 F-150 Regular Cab and SuperCrew Cab vehicles because the front seat-belt pretensioners can generate excessive sparks when they deploy, which could ignite and cause a fire. The vehicles included in the recall were built at the Dearborn Assembly Plant from March 12, 2014, through Aug. 23, 2018, and at the Kansas City Assembly Plant from Aug. 20, 2014, through Aug. 23, 2018.

What to do: Dealers will make necessary modifications to the interior at no cost to owners. Call Ford at 800-392-3673 or go to ford.com for details.

BSN Sports is recalling about 31,200 rubber toys because paint on them contains levels of lead that exceed the federal lead paint ban. Lead is toxic if ingested by young children. The toys were sold in catalogs and online from February 2017 through June 2018 for about $10 for a single toy and up to $145 for a set.

What to do: Take the toys away from children and call BSN Sports at 888-847-8816 or go to bnsports.com to get a merchandise credit.

Emerson Tool Company is recalling about 208,000 Ridgid NXT models HD06000 (6-gallon) and HD09000 (9-gallon) wet/dry vacs because the on/off switch can dislodge and expose wiring that poses a shock hazard. The vacs were sold at Home Depot stores and website from March 2018 through July 2018 for about $50 for the 6-gallon model and about $60 for the 9-gallon.

What to do: Stop using the vac and contact Emerson Tool Company at 888-847-8816 or go to emerson.com/en-us/commercial-residential/emerson-tool-company to get a free replacement powerhead assembly.

Boy Scouts of America is recalling about 110,000 neckerchief slides because they contain levels of lead that exceed the federal lead content ban. Lead is toxic if ingested by young children. The slides were sold at BSA retail stores and online from February 2018 through August 2018 for about $6.

What to do: For specific model details, call BSA at 800-323-0736 or go to scoutshop.org. Stop using the slide and return to any BSA retail store for a free replacement.

Prizer-Painter Stove Works is recalling about 7,100 BlueStar and Big Chill gas range and wall ovens because using the convection fan during preheating or broiling can cause accumulated gas to ignite and pose a burn hazard when the oven door is opened. The ranges and ovens were sold at specialty appliance stores and kitchen equipment dealers from May 2015 through October 2017 for $3,300 to $18,100. For a complete list of models, go to bluestarcooking.com or bigchill.com.

What to do: Keep the convection fan turned off and contact Prizer-Painter Stove Works at 800-449-8691 to schedule a free repair.

Kaz is recalling about 72,000 Stinger BK series insect zappers because the insect kill grid can detach and pose a shock hazard. The zappers were sold in stores and online from April 2018 through August 2018 for about $6.

What to do: Stop using the zapper and contact Kaz to return it for a full refund. For specific model numbers included in the recall, call Kaz at 888-480-2880 or go to kaz.com or stingerproducts.com.
Product Update
The latest ratings from our labs

The Once and Future Microwave

This modest appliance continues to earn its keep as a hardworking kitchen necessity, but new models have more power and additional features.

by Haniya Rae
MICROWAVES HAVE BEEN a staple of American kitchens since the mid-1980s, and for good reason. They offer quick and easy meal prep and speedy reheating of leftovers and coffee. But with so many cooking appliances vying for counter space (rice cooker, air fryer, grill, oh my!) what is a microwave still best for? And if you’re in the market for a new one, how do you pick the right model for your needs?

Consumer Reports evaluates microwaves based on how fast and evenly they heat. Our speed rating is based on how quickly a microwave heats a liter of room-temperature water. To test the defrost function, we use a microwave’s auto-defrost setting for a pound of frozen ground beef. After running defrost, we quickly separate and weigh the portions that are cooked, defrosted, and still frozen. We also test to see how thoroughly each model pops a bag of popcorn. All of this data and more informs our ratings, which start on page 24.

Bigger tends to be better when it comes to microwaves. CR’s labs have found that, as a group, small microwaves (about 700 watts), don’t perform well; most earn a rating of Poor for heating a bowl of water. For this reason, there are no small microwaves that we recommend.

Midsized microwaves (generally about 1,000 watts) fare much better and are the right choice for many households. About 2 feet wide, 1 foot tall, and 16 or so inches deep, our high-scoring midsized models are great at reheating a meal for two, have simple buttons for popcorn, and are quick with heating a cup of tea.

But some of the better midsized models are still not zippy enough to earn the top scores of large microwaves (most of them between 1,100 and 1,250 watts). So if you have the counter depth and want the best performance there is, you should consider a large microwave, about 6 inches deeper than a midsized one, but usually comparable in width and height. Large microwaves are generally more powerful and faster. Some are big enough to fit a 9x15-inch baking dish—that’s a whole lot of lasagna! For those who use a microwave to feed a family, a large one makes sense. And in a space without a conventional oven, such as a guest suite, a large microwave can cover most of the cooking territory.

Some microwaves have the technology to air-fry or grill, but the models with these capabilities don’t receive top scores as a microwave in our ratings.

CR engineers Larry Ciufo isn’t surprised. “The way microwaves are designed and the way air fryers are designed are very different,” he says. He advises consumers to buy appliances tailored to their cooking needs.

If your kitchen accommodates an over-the-range microwave, you probably know the advantages. These models don’t eat up precious real estate on your counter and can help vent air when you’re cooking on the stove. In terms of power, they’re comparable to large countertop microwaves. They generally measure 30 inches wide to fit neatly above your range. Some can accommodate a 9x15-inch baking pan, so you can expect to warm up a large meal in no time.

**How to Shop Smarter**

The path to microwave happiness is to bear in mind how you plan to use the appliance most often—and choose a model that will do that best. Don’t be distracted by functions that look like fun but you’ll never use, especially because you’ll pay more for them. For example, according to our member survey, only 16 percent of people who own a microwave with a popcorn button use the function at least weekly. And only 15 percent with a speed-cook function use it weekly or more often.

**Make sure it brings the heat.**

One of the most important tests in CR’s microwave labs is for heating evenness.
Product Update

Check this rating column in our charts to ensure that a microwave will do its primary job well. According to our survey, 98 percent of members use their microwaves for reheating at least weekly. All models come with buttons for adjusting power levels or the percentage of power used to heat food or drinks, so as you get to know your appliance, you can change the settings to your preferences.

**Size up shortcuts.**
Shortcut buttons are labeled for particular foods (pizza, popcorn, etc.) with preset cook times. Reheat buttons are sometimes backed by sensors that stop the heat so that it doesn’t overcook your food. In this way, they eliminate guesswork and can make your life easier.

**Take control of the controls.**
If the control buttons are confusing, you could be setting yourself up for a world of frustration. We factor into our ratings how easy it is to program a microwave and whether the model has a smart, well-designed set of quick keys. And for those who don’t want to use keypads as much, Alexa-enabled microwaves—which allow you to call out commands—are on the way. (CR has tested one model and will test others when they’re available.)

**Have a close encounter.**
Some manufacturers have redesigned the touchpad on certain microwaves, often at the expense of ease of use. Once you’ve narrowed down your options, it’s wise to find them at a retailer near you and play around with them. Seeing microwaves in a store rather than online also gives you a real-world sense of size. Dimensions on paper are one thing, but assessing a countertop cube in person and fully understanding how much surface area it will occupy is another.

**Microwave Safety Tips**
Most people know not to put metals or aluminum foil in a microwave to avoid sparking and fire risk. But it’s also smart to keep the following objects out, too:

**Nonmetal sharp objects.**
Sharp objects that aren’t metal, such as toothpicks, can set off a phenomenon known as arcing (sparks flying) inside a microwave.

**Kitchen sponges.**
Heat can kill the bacteria in sponges, but a quick microwave zap is unlikely to kill all of them. Worse, the bacteria that survive will become heat-resistant and possibly more harmful. Your best bet is to toss an old sponge outright.

**Eggs in the shell.**
They can explode in a microwave or after you’ve removed them. The sound is quite loud, and hot flying bits can sting.

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**FACE-OFF:**

**Should You Zap It or Toast It?**

In this corner we have the microwave, which works by agitating water, sugar, and fat molecules to prepare food, and is known for its speed. It’s especially effective at heating food that has a lot of liquid in it, and it works well for steaming. In the opposite corner is the toaster oven. With hot coils that heat the external part of food first, it’s like a mini version of your main oven, meaning it’s good at crisping and baking.

---

**Better in a Microwave**

- Popcorn
- Reheated noodle or rice dishes
- Steamed fish
- Steamed vegetables
- Reheated stews and soups

**Better in a Toaster Oven**

- Small batches of cookies
- Reheated food with a crust (egg rolls, pizza)
- Baked fish
- Roasted vegetables
- Baked potatoes
The Microwave Matchmaker

We highlighted these tested models for their unique features to help you start your search.

**Countertop**

**A LOT TO LOVE (LARGE)**

- **Panasonic NN-SN736B**
  - 12Hx22Wx20D $165
  - 75

This big boy can accommodate a 9x15-inch baking dish, which means it can easily reheat a family-sized lasagna or casserole. It earns a rating of Excellent in our speed of heating test and has a "doneness" sensor that prevents overcooking. We also appreciate that it’s fairly quiet and that its controls are easy to use. We think its size, price, and strong performance make it a triple threat.

**VERSATILE PLACEMENT (MIDSIZED)**

- **Danby DMW11K8BLDB**
  - 12Hx21Wx16D $90
  - 65

Sporting a control panel that’s easy to program thanks to very legible buttons, this Danby is a good low-cost microwave that can still do a decent job. It receives a rating of only Good in our heating evenness test (how well a microwave can heat a dish of mashed potatoes through to the center). But if all you’re using it for is to zap your coffee, make popcorn, or reheat a slice of pizza, this might be a good choice at a great price.

**KEEPS A LOW PROFILE**

- **GE JVM3160RFSS**
  - 16Hx30Wx15D $250
  - 82

This strong (and quiet) performer is especially notable because it’s tough to find an over-the-range model for this price. It earns a rating of Very Good for heating evenness, an important test. GE over-the-range models earn a rating of Good for predicted reliability; they’re middling for their estimated breakage rate by the end of the fifth year of ownership. This model doesn’t have a sensor, so you’ll be fiddling with timing till you get used to it.

**SLEEK DESIGN (MIDSIZED)**

- **LG NeoChef LMC1275SB**
  - 13Hx22Wx18D $160
  - 82

If minimalist good looks matter to you, this model, with its pared-down control panel, will make you purr. It has 10 power levels and seven auto-cook options. It also features something called Smart Diagnosis. If something is wrong, call LG and when instructed, hold your smartphone up to the microwave to ping the company’s service center, which will run a diagnostic test.

**NICE PRICE AND EASY TO USE (MIDSIZED)**

- **Danby DMW11K8BLDB**
  - 12Hx21Wx16D $90
  - 65

Panasonic sells a trim kit that allows you to mount this microwave to a wall or inside a cabinet if you’re short on counter space.

**OVER THE RANGE**

**STRONG, SILENT TYPE**

- **GE JVM3160RFSS**
  - 16Hx30Wx15D $250
  - 82

Sleek and squat; this over-the-range Whirlpool microwave is above average in our ratings. Its shape is unique; if you prefer more space between your range and microwave, this model might work because it’s only about 11 inches high. It earns an Excellent rating for venting and airflow but only a Good for heating evenness, so it isn’t the best at getting dishes uniformly warm. Whirlpool microwaves have a rating of Very Good in our predicted reliability survey.

**VERSATILE PLACEMENT (MIDSIZED)**

- **Panasonic NN-SA651S**
  - 13Hx21Wx16D $200
  - 79

This model packs the power you need for reheating food. It earns a rating of Excellent in our defrosting and speed of heating tests, but it doesn’t come with a sensor. It earns a Very Good rating in our heating evenness test.
### Power Up

There’s strength in numbers (wattage, that is), so nearly all of the microwaves we’ve called out here are 1,000 watts or more. We also test small microwaves with lower wattage, but they disappoint as a category.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Brand &amp; Model</th>
<th>Overall Score</th>
<th>Price</th>
<th>Survey Results</th>
<th>Test Results</th>
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<td>0.9 1.7  900</td>
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</table>

A microwave’s ability to heat food evenly is critical, whether the appliance is used primarily to warm up leftovers or to defrost frozen food. To test the evenness of heating, Consumer Reports’ testers put a bowl of cold mashed potatoes in a microwave, heat it for 10 minutes, then take the temperature of the potatoes in 20 different spots with the help of thermocouples (left). “We use mashed potatoes because as a food, they’re uniform throughout,” says Kyaw Naing, a technician. “We can control the amount of liquid in the mixture and get consistent test results.” Other microwave lab tests include heating water for 5 minutes to see what temperature it reaches, using a decibel meter 3 feet from each microwave to measure noise levels, and making popcorn. (Our technicians check for thoroughness by weighing the number of unpopped kernels.)

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INSIDE CR’S LABS

A microwave, like this LG model, is tested to see how well it heats food.
### Large Countertop Microwaves

<table>
<thead>
<tr>
<th>Rank</th>
<th>Brand &amp; Model</th>
<th>Overall Score</th>
<th>Price</th>
<th>Test Results</th>
<th>Features</th>
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<td>Defrosting evenness</td>
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<td>🟢</td>
<td>🟢</td>
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<td>$250</td>
<td>🟢</td>
<td>🟢</td>
</tr>
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<tr>
<td>15</td>
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<td>72</td>
<td>$190</td>
<td>🟢</td>
<td>🟢</td>
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</tbody>
</table>

**How We Test:** Heating evenness reflects how evenly a model reheats a dish of cold mashed potatoes. Defrosting evenness is based on how well the auto-defrost program defrosts a pound of frozen ground beef. Speed of heating is based on the temperature rise of water that’s heated. Noise reflects how quiet the appliance is while it’s on high. Ease of use includes how easy it is to set the microwave without referring to the instructions. Venting (airflow) is based on the volume of air drawn in by the internal fan on the highest setting of an over-the-range model. Usable capacity is the usable space based on our measurements and excludes the corner spaces for models with rotating turntables. Note that most over-the-range models allow you to turn off the rotation to fit large dishes. With the rotation off, measured capacity approximates claimed capacity. The Overall Score for over-the-range models combines lab test results with survey data for predicted reliability and owner satisfaction, and is based on a 100-point scale. Predicted reliability estimates the likelihood that newly purchased models from a given brand, not under service contract, will break within the first five years. Owner satisfaction is based on the proportion of CR members who are extremely likely to recommend the microwave they bought. In cases where we have insufficient survey data to provide a brand-level rating, which we indicate by a dash (—), we assume the model has average reliability and satisfaction. The Overall Score for countertop models is based on lab test results only. Price is approximate retail.

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**Recommended Rankings**

1. Panasonic NN-SE78SS
2. GE Profile JES2251SS (SS)
3. Panasonic NN-SD97SS
4. GE JES2051SN (SS)
5. Panasonic NN-SN966S
6. Panasonic NN-SD945S
7. Panasonic NN-SD745S
8. LG LCRT2010 (ST)
9. Kenmore Elite 79393
10. Panasonic NN-S736B
11. Whirlpool WMC5052AWS
12. LG LMC1575
13. GE JES1656SRSS
14. GE Profile PES7227SLS
15. Frigidaire FFC2278LS (S)

**All-Access or Digital members can find the latest ratings at CR.org/microwaves1218.**
Get the Most TV for Your Money

Fall is prime time for TV shopping, with some models reduced as much as 50 percent. But it takes consumer smarts to navigate Black Friday and other holiday hype—and still come home with a great deal.

by James K. Willcox

SAVVY SHOPPERS KNOW that timing can be everything if you want a great price. That’s especially true when you’re shopping for a new TV.

And fall is one of the best times to get a deal on a new set as retailers scramble to lure in shoppers during the long run-up to Black Friday.

“New TVs come out every year in the spring, and their pricing starts to decline quickly,” says Deirdre Kennedy, senior analyst for TVs at the retail market research firm GAP Intelligence. “But they tend to really drop in October, and then even more sharply by the time Black Friday comes around. It’s not just hype; this really is a great time for consumers to shop for a new set.”

But it can be tricky to find the best deal on a TV you’ll love without getting confused by all the holiday sales come-ons. Here’s what you need to know.

Check Out ‘Look-Alike’ Models

Retailers offer plenty of bargains this time of year, but they don’t make their sales simple to navigate.

For starters, those eye-popping, too-good-to-be-true deals you see around Black Friday (known as “doorbuster specials”) are usually available only in limited quantities. They may inspire you to head to the stores or a retailer’s website, but supplies run out quickly, and most people won’t be able to take advantage of the deal.

But don’t worry if you fail to snag one of those super-cheap televisions. You’ll still be able to find a great deal. And many doorbuster models are very basic sets that could leave you feeling unsatisfied, anyway. For instance, last year we saw a $125 39-inch Element set and a $250 55-inch Westinghouse set. Those are very low prices, but TVs from those brands usually haven’t fared well in our ratings.

You’ll also see low-priced TVs made specifically for Black Friday and often available through a single retailer. These sets are called “derivatives” in the TV industry because they’re similar to the mainstream models we see all year but with different model numbers and often fewer features. For example, they may have fewer HDMI inputs or come with a simpler remote control.
Some of these TVs can be a good deal, depending on which features are missing. In 2017, a 55-inch Samsung derivative we tested was about $170 cheaper than the TV it was based on and it performed equally well in CR’s tests.

“We’ve seen more of these derivative models in recent years,” Kennedy says. “These models tend to stick around past the holidays and become part of the brands’ regular assortment.” In addition to derivative models, you might see completely fresh low-end models appear at this time of year.

Derivatives and new-for-the-holidays models can make it tough for consumers to judge the quality of many TVs being advertised. It can be difficult to compare prices, too. After all, if a set is being sold at only one retailer, you can’t shop around or ask a store to honor a price-match guarantee.

**Pick Your Timing**

You’ve always been able to score a great deal on a mid-tier TV around Black Friday and Cyber Monday, both of which fall right after Thanksgiving. But years ago there were fewer steep discounts on fully featured top-performing sets from major brands.

That’s starting to change. In fall 2017, for example, prices of some expensive LG OLED TVs dropped by as much as 40 percent from their high points, according to GAP Intelligence.

That means consumers looking for a high-end set might find one at a great price this fall. If you can’t—or you’re just not ready to buy—it’s fine to wait a couple of months. You’ll have another chance at a deal during the promotions that traditionally start just before the Super Bowl, in early February.

And if history is a guide, prices on leftover 2018 TVs will stay low into the spring as retailers try to make room on the shelves for 2019 models.

**Don’t Hesitate to Haggle**

You can ask for a better deal whether you’re shopping online or at a walk-in store. When we survey CR members about electronics shopping, we find that many consumers don’t try to bargain, but that a majority of people who do try succeed in getting a better deal. You can ask in person at a walk-in store or by picking up the phone or opening a chat window if you’re shopping online.

Haggling may seem intimidating, but you don’t need expert negotiating skills. Thirty-one percent of the in-store shoppers who negotiated said they simply asked for a better deal.

It can be helpful to come in armed with competitors’ prices. And if you can’t get a break on price, ask for something else. For instance, Karen Jaffe, a manager in Consumer Reports’ survey research department, notes that 57 percent of shoppers who negotiated for a free warranty or warranty extension were successful. “So it’s always worth trying to haggle,” she says, “and more often than not you’ll have some level of success.”

**Pick Your Priorities**

A steep discount on a high-end set can still have you spending $1,500 or more. Even if that fits in with your budget, you won’t know if it’s a worthwhile purchase until you decide what you’re looking for in a television.

Would you rather skimp a bit on picture quality to buy a set with a bigger screen, or get the best possible picture on a smaller set? Do you plan to use an external sound system or sound-bar speaker? If you do, don’t pay extra for a TV with great sound.

The viewing angle is especially important if you plan to invite friends to watch movies or sports with you. The wider the viewing angle, the better the picture looks for anyone sitting off-center.

These decisions can help you use our ratings more effectively. Not all of the columns, which cover different features and tests, matter as much to all people.

**Consult Our HDR Scores**

A majority of the models in our ratings can deliver a satisfying TV-watching experience, but there are some clear differences between the top-performing models and those in the middle of the pack. And right now, the biggest differentiator in performance is HDR, or high dynamic range.

“When done well, HDR represents a more natural illumination of image content,” says Claudio Ciacci, who heads up TV testing at Consumer Reports. “That includes the TV’s ability to retain the vibrancy of colors as a scene gets brighter.”

TVs with good HDR performance can display finer gradations from black to white. You’ll see more nuanced detail in the shadows of dark scenes—such as nighttime in a garden—that otherwise might just look black. And you’ll be able to discern more detail in bright scenes, such as a daytime sky with both the sun and clouds. The best HDR TVs have high peak brightness levels that can deliver more realistic “specular highlights,” such as the sun glinting off a truck’s chrome bumper. The result looks more like what we see in real life.

The TV show or movie you’re watching has to be shot and transmitted to your set in HDR for this feature to work. (If you’re streaming a movie, you’ll usually see a flag on the title that lets you know it’s in 4K HDR.) There’s a growing selection of this content available, especially from streaming services such as Amazon and Netflix, and on 4K Ultra HD Blu-ray discs.

But not all TVs that tout HDR do a great job presenting these images in all their lifelike glory. That’s why our ratings (starting on page 28) show a separate column for the HDR score.

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**Correction**

A longer version of “Get the Most TV for Your Money” ran in the November issue (pages 26 to 33), but unfortunately the TV ratings charts were printed incorrectly. While the rank order and overall scores were correct, individual “test results” scores (represented by colored chevrons) were not. We are republishing here a condensed version of the story with the full corrected ratings. CR regrets the error.
**Ratings**

Consumer Reports’ TV ratings now include a separate score for how well a model can present HDR images. In addition to overall ratings, check the scores for HDR, sound, and other factors that matter to you.

### 60-INCH AND LARGER TVs

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<th>Rec. Rank</th>
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### 60-INCH AND LARGER TVs Continued

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### 55- TO 59-INCH TVs

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### 55- TO 59-INCH TVs

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### 39- TO 43-INCH TVs

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**How We Test:** The Overall Score is out of a total of 100 points. Ultra HD performance is an evaluation of how well a TV reproduces full-quality ultra high definition (or 4K) using 4K content. The HDR score reflects how effectively the TV can show high dynamic range when playing HDR content. HDR heightens the difference between the darkest blacks and brightest whites in an image, allowing for more nuanced detail in both the shadows and bright parts of a scene.

HD picture quality is evaluated after a TV is adjusted to produce the highest-fidelity image possible, encompassing detail, color accuracy, and contrast. Sound quality reflects overall clarity of sound, depth of bass, effective volume level, and distortion for dialogue and music. Viewing angle reflects clarity and color accuracy from various horizontal and vertical angles.

Readers with a Digital or All-Access membership can find the latest ratings at CR.org/tvs.
YOUR AIRLINE TRAVEL SURVIVAL GUIDE

• The most restrictive fare, **BASIC ECONOMY** is use-it-or-lose-it and comes with few amenities.

• **STANDARD ECONOMY** costs more than basic, but you can choose your seat free of charge and change travel plans for a fee.
With fees multiplying and tempers flaring, learn how to snag deep discounts, get the best seat for your money, avoid nasty surprises, increase your comfort, and more.

**BY OCTAVIO BLANCO**

- The priciest coach option, **ENHANCED ECONOMY** offers extra space, a seat often near the front of the plane, and other perks.

**PLUS**
Check out our ratings of best & worst airlines and carry-on luggage.
Even carry-on bags are getting less room: Alaska Airlines reduced the size of bags it allows onboard by 32 percent in June, and certain airlines won’t allow you to bring a carry-on at all unless you pay a fee.

But it’s not just irritations such as small bathrooms and vacuum-packed seating that make modern-day air travel so unpleasant. Planes today take off 85 percent full, according to the Department of Transportation, so there’s plenty of competition for space in overhead bins and little chance you’ll end up next to an empty seat. And as anyone who has purchased a ticket online knows, the price you wind up paying can bear little resemblance to the one that lured you in, once the numerous ancillary fees and other additional charges are factored in.

Flying wasn’t always so frustrating. Many of us fondly remember the days before deregulation, when the fare was the fare and airlines battled for our business by trying to outpamper us. But with low-cost, no-frills carriers such as Allegiant, Frontier, and Spirit nibbling away at the market share of giants such as American, Delta, and United, these legacy airlines followed the lead of their low-cost competitors and began charging for niceties that were once included, such as allowing passengers to choose their seats or to carry on a bag. “They became ruthlessly focused on cost reduction,” says Samuel Engel, an analyst who leads the aviation group at consulting company ICF.

In their most recent gambit to attract cost-conscious fliers and increase profits, the major carriers have carved economy class up into three tiers: basic economy, a bare-bones, highly restricted fare;
Understanding the New Economy Class

American, Delta, and United now offer three levels of domestic economy class, ranging from a cheap and restrictive bare-bones fare to a roomier—and pricier—seat with enhanced perks. To help you choose the one that best meets your needs and budget, this chart shows how each stacks up against the rest.

<table>
<thead>
<tr>
<th>Seat Width</th>
<th>Seat Selection When Booking Included in Fare</th>
<th>Priority Boarding</th>
<th>Carry-On Bag</th>
<th>Free Beverage</th>
<th>Free Snack</th>
<th>Free In-Flight Entertainment</th>
<th>First Checked Bag Fee</th>
<th>Same-Day Ticket Change Fee</th>
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<tr>
<td><strong>Basic Economy</strong></td>
<td>30 to 31 inches</td>
<td>American: 16.6 to 17.8 inches&lt;br&gt;Delta: 16.3 to 17.3 inches&lt;br&gt;United: 16 to 17.3 inches</td>
<td>No</td>
<td>United: No&lt;br&gt;American/Delta: 1 bag</td>
<td>Yes</td>
<td>Yes</td>
<td>No changes allowed; value forfeited if not used</td>
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<tr>
<td><strong>Standard Economy</strong></td>
<td>Same as in basic economy</td>
<td>American: 16.6 to 17.8 inches&lt;br&gt;Delta: $15&lt;br&gt;United: $15 and up</td>
<td>Yes</td>
<td>American/Delta/United: 1 bag</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td><strong>Enhanced Economy</strong></td>
<td>American: 33 inches&lt;br&gt;Delta: 34 inches&lt;br&gt;United: 34 inches</td>
<td>American: 16.6 to 17.8 inches&lt;br&gt;Delta: 17.3 inches&lt;br&gt;United: 17 to 17.3 inches</td>
<td>Yes</td>
<td>American/Delta/United: 1 bag (Delta offers dedicated space)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>American/Delta: $75&lt;br&gt;United: $200</td>
</tr>
</tbody>
</table>

Sources: American Airlines, Delta Air Lines, and United Airlines. Aircraft data are for the Boeing 737 Max (American), 737-900ER (Delta), and 737-900 (United). Standard economy is called Main Cabin on American and Delta, and United Economy on United. Enhanced economy is called Main Cabin Extra on American, Delta Comfort+ on Delta, and Economy Plus on United. Distance from a point on a seat to the same point on the seat in front or behind. Some passengers may qualify for free priority boarding. Certain fees and restrictions may be waived for elite frequent flyer or credit card members.
standard economy; and an enhanced-economy experience, which comes with more legroom and other enticements (see chart on the previous page).

This move has left travelers with more choice—and more confusion. The new rock-bottom fares may look like a great deal at first glance, but they’re less appealing once consumers understand that they come loaded with restrictions. Similarly, airlines offer enticements such as early boarding, extra legroom, and the ability to check a bag—all for a price. When you tally up the cost of all the extras, a fare that originally looked like a good deal can quickly turn out not to be.

“The airline industry has deliberately made comparison shopping and booking as confusing as it can,” says William McGee, an airline and travel adviser for Consumers Union, the advocacy division of Consumer Reports. “Such opaque pricing makes it easier for the airlines to impose more—and higher—fees, and to increase base fares as well.”

The following five tips, along with our airline and luggage ratings, will arm you with the strategies you need to cut through all the confusion and to get the most value for your travel dollar. We’ll even show you how to pack your carry-on bag like a pro. Bon voyage!

1. Know How to Navigate the New Economy Class

There used to be just three choices when booking a seat on a major airline: coach, business, and first class. Now that American, Delta, and United have created new fare options to remain competitive with low-cost carriers, travelers on these airlines have three options in coach alone.

At the cheapest end of the spectrum, bare-bones basic-economy fares are available on many domestic routes and are expanding to international ones. (Alaska Airlines and JetBlue have announced that they will also be adding basic-economy fares.) Although it might save you money, basic-economy is the most restrictive fare: It is nonrefundable and nonchangeable. If you’re unable to use the ticket, you lose its entire value. You can’t choose your seat when booking, you have to wait to board, and on United you can’t take a carry-on bag. (If you arrive at the gate with one, it will be checked for you and you’ll be charged a fee of at least $30 per bag, plus $25 per bag for having it done at the gate.) Basic-economy seats are often the same size and offer the same legroom as standard-economy seats.

A basic-economy ticket might not be such a bargain when you consider the perks you don’t get and the ones you could end up paying separately for. “The airlines are using these fares to attract price-sensitive consumers and then get them to pay far more than they intended in additional fees when they see just how few amenities are offered with the basic-economy ticket,” McGee says.

“Until airlines become more transparent about their pricing, consumers have to be diligent when comparison shopping.”

The next tier, called Economy on United and Main Cabin on Delta and American, is less restricted. These fares usually entitle you to choose your seat at the time of booking, take a carry-on, board in the middle of the pack, and make itinerary changes or apply the value of an unused ticket toward future travel for a fee.

The enhanced-economy category, which also goes by different names on different carriers, offers seats with a few inches more legroom closer to the front of the plane (for faster deplaning) or in exit rows. Other perks can vary. You may get complimentary alcohol. Priority boarding is included on Delta. On United you can be among the first to board for a fee starting at $15; American charges a fee of $9 to $74 for that privilege.

To help you [ CONT ON PAGE 36 ]
Are Low-Cost Carriers Really the Cheapest?

NOW THAT MAJOR airlines are going head-to-head with low-cost carriers, we wanted to get an idea of which offered the best fares. We compared the price of a low-cost carrier’s no-frills ticket with a traditional carrier’s basic-economy ticket, as well as the enhanced-economy fares of the low-cost and traditional carriers, on three round-trip routes. Our findings are far from conclusive but suggest that, on routes where these options are available, traditional airlines may match or beat the price of a no-frills seat on a low-cost carrier, while the budget airlines might save you money on a seat with extra room and other amenities.

Methodology: Enhanced-economy tickets include seat selection, extra legroom, one carry-on and one checked bag, ticket changeability, and advance boarding. Additional perks may be included. Basic-economy ticket comparisons include the cost of a carry-on bag. We chose the cheapest nonstop base fare and added amenities to it. Prices are the average of the cost of tickets found Sept. 24, 2018, for trips scheduled three, six, and 12 weeks ahead (flights on the Chicago–Fort Myers comparison differed by one day). Flights were round-trip with a one-week stay. Metro area airports were used when available.

Always pay with a credit card, check Better Business Bureau ratings, and try to stick to companies that have been in business for at least 10 years. Membership in trade associations such as the American Society of Travel Advisors and the International Airlines Travel Agent Network suggests legitimacy but does not guarantee it.

OTHER WAYS TO SAVE
Look for sales and deep discounts offered by the airlines. Aer Lingus, Alitalia, Cathay Pacific, Virgin Atlantic, and other carriers allow coach-class ticketholders to bid on upgrades for savings off the standard premium fare. La Compagnie, an all-business-class carrier, offers fares ranging from about $1,700 to $2,500 round-trip from New York to Paris, which is well below the going rate of about $9,000 on Air France. The trade-off: Its seats are not fully flat. And low-cost carriers such as Norwegian Air have premium sections on certain flights that offer many business-class-style perks, sometimes for as little as $500 more than a coach seat.

—Barbara Peterson

the Philippines. You also might not be on a nonstop flight. Many business-class cabins have lie-flat seats, power ports, and personal entertainment, but others are less luxurious. Always check the website of the airline you’ll be flying to research the seat size, legroom, recline, and amenities before you purchase a ticket.

Ed Perkins, consumer advocate at SmarterTravel and a former Consumer Reports travel editor, says consumers should beware of discounts that sell tickets bought with frequent-flyer miles. It’s against airline rules and could cost you much more if the airline finds out and cancels the ticket. (A ticket that doesn’t earn mileage credit might be one tip-off.)

Always pay with a credit card, check Better Business Bureau ratings, and try to stick to companies that have been in business for at least 10 years. Membership in trade associations such as the American Society of Travel Advisors and the International Airlines Travel Agent Network suggests legitimacy but does not guarantee it.
THE FINANCIAL ARGUMENT for traveling light got even stronger this fall when American, Delta, JetBlue, and United raised their checked-bag fee from $25 to $30. Limiting your luggage to one carry-on bag can certainly save you money, but it can also seem impossible to anyone who’s used to cramming a big suitcase full of “just in case” for every trip. Follow these steps to get everything you truly need into your carry-on bag—and maybe still have room left for souvenirs.

1. **Make a List of Your Needs**
   Pare your packing down to essentials: Take only what you will need; not everything you might need. Check the weather forecast for your destination and think through your itinerary day by day. The list should include clothing, electronics, medications, and toiletries. Transportation Security Administration rules require that liquids be in containers of 3.4 ounces or less and that all of them must fit into a quart-sized resealable bag.

2. **Rethink Your Wardrobe**
   Rather than packing a different outfit for each day, take items that easily mix and match, so

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**How important is it for you to sit next to a window or on the aisle?**
In general, basic-economy tickets don’t allow you to select seats when you book, so you could very well end up in one of the dreaded middle seats. (United allows basic-economy ticketholders to pay a fee, starting at $5, to select a seat on certain flights.) You’re effectively leaving your seat selection to chance with a basic-economy ticket, so if seat location matters a great deal to you, this might not be the best choice.

**Are you traveling with children?**
Because basic-economy tickets don’t usually allow you to select seats when you book, they can present challenges for people who want to be seated together, particularly for parents traveling with young children.

An American Airlines spokesperson told CR that the airline has automated tools to seat children with a family member; a Delta spokesperson said that the airline works with customers on a case-by-case basis and

determine which tier of coach is the right one for you, consider these questions:

**Do you hate being squeezed?**
If a tight seat is torture on even the shortest trips, enhanced economy may be worth the added cost for the extra legroom and more generous recline it provides. Prices vary, but we found that you could spend around $200 or more over basic economy, depending on your route and when you bought your ticket.
you can wear as many pieces as possible more than once. Anne McAlpin, author of “Pack It Up: The Essential Guide to Smart Travel” (Flying Cloud Publishing, 2016), recommends limiting yourself to three pairs of shoes and packing three tops for every bottom.

“The bottoms should be neutral colors like dark navy, denim, and khaki,” she says. “Then you can pair any color top with those bottoms.”

Pack in the Right Order

Start by consulting the website of the airline you’ll be flying to make sure your carry-on is within the maximum acceptable dimensions. These change from time to time and can differ among airlines.

Place heavier items at the base of the suitcase, near the wheels, to keep it stable and help to prevent it from tipping over, McAlpin says. Next, fill the suitcase with your clothes. Rolling soft items that don’t wrinkle easily will free up more space. (They take up less volume than folded garments.) Slide wrinkle-prone items into a dry-cleaning bag or a large trash bag and lay them flat across the top, McAlpin says.

Strategize Your Suitcase Space

Use every inch of available space. That means flattening scarves and belts and placing them along the perimeter and filling a half-empty shaving kit with rolled-up underwear or socks in a small plastic bag. Pack shoes toe to heel, and don’t leave them empty. “The inside of your shoes is a great place for things like sunglasses in a case,” says Jennifer Snyder, a certified professional organizer.

Packing experts also recommend using compression bags or cubes to squeeze even more into your carry-on (although they won’t reduce the weight of your suitcase) and make items easier to organize and find.

Think Outside the Bag

Most airlines limit passengers to one carry-on bag and one personal item, such as a purse or computer bag. To maximize what you can carry onboard while staying within the airlines’ two-item limit, use a tote bag or backpack that will fit under the seat in front of you. You can fill it with items that you couldn’t squeeze into your carry-on and still have room left over for a purse or laptop bag.

—Beth Brauerman

encouraged anyone with questions about seating to call Delta reservations. United referred us to Airlines for America, an industry trade group.

“Every effort is made to make sure families sit together,” says Alison McAfee, Airlines for America’s managing director of communications.

“But many variables contribute to individual cases—specifically, how far in advance a booking was made and how many seats are needed together,” McAfee says.

“Do you carry an airline-branded credit card?”

These cards can offer fliers perks such as a free checked bag or priority boarding (more on that later). But read the fine print. Basic-economy ticketholders are often ineligible for upgrades.

Choose the Best Seat at the Best Price

Before you to pay more for a so-called preferred seat, research all the available options. In some cases, the cheaper seats on a plane can be as comfortable as, or better located than, those the airlines charge extra for, says Tracy Stewart, editor of Airfarewatchdog. More expensive seats could have a misaligned window (meaning you’ll have no view of the clouds) or they might be in brighter, louder areas of the plane, such as across from the bathroom or galley.

Once you’ve decided on a flight (but before you’ve chosen your seats) check SeatGuru, a website that offers its own analysis of how much legroom and recline each seat offers. The site might also alert you to any undesirable attributes.

Choose a Top-Rated Airline

In our latest airline ratings survey, CR members identified a few carriers that deliver consistently good travel experiences (see ratings, on page 38).

Of the 10 airlines in the survey, Southwest landed at the top of the ratings for overall satisfaction by passengers on economy flights. It earned high scores for service, ease of check-in, cabin cleanliness, pricing transparency, and keeping passengers informed of flight status. This no-frills carrier lists its fees economy. It’s more expensive, but the peace of mind it provides may be worth it.
Ratings  Flight School  The biggest complaint about flying economy? Uncomfortable seats. CR members rate their overall satisfaction with economy-class service on major and low-cost U.S. airlines, as well as on several individual measures.

### Airline Overall Score Survey Results

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<tr>
<th>Airline</th>
<th>Overall Score</th>
<th>Cabin cleanliness</th>
<th>Check-in ease</th>
<th>In-flight entertainment</th>
<th>Information on flight status</th>
<th>Legroom</th>
<th>Pricing transparency</th>
<th>Seating comfort</th>
<th>Selection of complimentary food and beverages</th>
<th>Selection of paid food and beverages</th>
<th>Service from airline staff</th>
<th>WiFi connectivity and consistency</th>
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<tbody>
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</table>

**How We Survey:** Ratings are based on our summer 2017 survey of 52,089 Consumer Reports members reporting on their experiences on 96,897 economy-class domestic flights between July 2016 and June 2017. Economy included basic-economy, economy, and premium-economy flights. The Overall Score represents overall satisfaction with the flight experience and is not exclusively determined by factors under the survey results. A score of 100 would mean that all respondents are completely satisfied; 80, that respondents are very satisfied; and 60, that respondents are somewhat satisfied, on average. Differences of fewer than 2 points are not meaningful. Each rating category under Survey Results reflects average scores on a scale from Very Poor to Excellent. Ratings are based on responses from CR members, who may not be representative of the general U.S. population.

clearly and lets you check two bags free of charge.

Alaska Airlines, JetBlue, and Hawaiian Airlines are also among the highest-rated airlines for economy flights. Like Southwest, they received favorable ratings for service, ease of check-in, cabin cleanliness, pricing transparency, and keeping passengers informed of flight status.

That said, if money is your primary concern, don’t overlook ultra-low-cost airlines such as Allegiant, Frontier, and Spirit. Even though Frontier and Spirit have among the lowest reader scores in our ratings, they and other budget airlines have begun to offer perks—including early boarding and wider seats with extra legroom—for a fee.

When we compared the prices of enhanced economy on American and Delta with similarly upgraded service on low-cost carriers (see “Are Low-Cost Carriers Really the Cheapest?” on page 35), we found that the low-cost airlines offered a better deal on all three routes we compared.

For example, an Allegiant Airlines round-trip fare between Chicago and Fort Myers, Fla., which included extra legroom, a carry-on bag, a checked bag, and early boarding, was about $200 cheaper than the price of a Main Cabin Extra ticket on American Airlines with comparable space and amenities.

While they may save you money, remember that low-cost carriers tend to have smaller fleets, so they might not be able to put you on another flight quickly if your flight is canceled or delayed, McGee says.

### 4. Find a Rock-Bottom Fare

Consumer Reports has concluded in previous airfare shopping tests that the best way to find the lowest fare is to search multiple times over multiple days. You’ll also increase your chances of snagging the lowest price by shopping broadly, at both airline websites and third-party sites such as Google Flights, Kayak, and Orbitz.

“No single travel site or airline consistently offers the best deals in all cases,” McGee says. Not all airlines appear on all third-party sites (Southwest, the top-rated carrier in our survey, doesn’t appear on any of them), so always check fares directly with the airline sites.

Casting a wide net is only the beginning. To find the best deals you’ll also need to:

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### Ratings

#### Open-and-Shut Cases
Ratings of carry-on suitcase brands, based on CR member satisfaction surveys.

<table>
<thead>
<tr>
<th>Brand</th>
<th>Overall Score</th>
<th>Durability</th>
<th>Ease of carrying</th>
<th>Ease of packing</th>
<th>Stowability</th>
<th>Wheelability</th>
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##### HOW WE SURVEY
Ratings are based on 13,780 CR members’ responses to questions about satisfaction with carry-on suitcases from our fall 2017 survey. The Overall Score represents overall satisfaction with the carry-on suitcase and is not exclusively determined by factors under the survey results. A score of 100 would mean that all respondents are completely satisfied; 80, that respondents are very satisfied; and 60, that respondents are somewhat satisfied, on average. Differences of fewer than 4 points are not meaningful. Each rating category under Survey Results reflects average scores on a scale from “completely dissatisfied” to “completely satisfied.” Ratings are based on responses from CR members, who may not be representative of the general U.S. population.

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### Pay attention to fees
Not all airline and third-party websites provide all optional fees in a convenient and transparent manner during the shopping and booking process. (United, for example, requires shoppers to enter specific flight information and dates before providing checked-baggage fees.) That’s why Consumers Union has been fighting for years for full fare and fee transparency through all booking channels. To highlight these kinds of high and hidden expenses and help consumers to fight back, Consumer Reports is launching a program called “What the Fee?!” (WhatTheFee.com). No matter where you book, be sure to understand the fare category you’re purchasing and read the refund and baggage policies before you buy it.

### Use price alerts and other fare-tracking tools
Sites such as Airfarewatchdog, Google Flights, Kayak, TripAdvisor, and others offer fare trackers that alert you when the price drops on a route that you want to fly. Other tools on some of these sites will predict whether fare prices are likely to rise or fall, and Google Flights has an itinerary tool that shows how the cost of a flight will be affected if you decide to leave or return a day or two sooner or later. Many of these tools are also available as apps that you can download to your phone. Note that airlines must allow you to hold a reservation at the quoted fare, or cancel a booking without penalty, for 24 hours after you pay for it, as long as you’re departing in seven or more days. That means you have 24 hours after purchasing your ticket to continue looking for a lower fare. (American and United also allow consumers to place a hold of up to seven days on a reservation for a fee.)

### 5. Carry an Airline-Branded Credit Card

Airline-branded credit cards can come with generous benefits. The Delta Reserve card, for instance, offers seat upgrades for cardholders with Medallion status on a space-available basis (basic-economy fares are not eligible for upgrades) and access to airport lounges. United’s MileagePlus Card offers cardholders who are also MileagePlus Premier members complimentary upgrades when available. Other benefits include priority boarding and two free checked bags. But keep in mind that these cards have hefty annual fees of $450, so unless you travel frequently, they might not be worth the money.
WHEN ARE SALES TOO GOOD TO BE TRUE?

Lawsuits over deceptive practices and bogus discounts are on the rise.

We show you where and how to find truly good deals.

We share smart tactics so that you never overpay.
DEEP IN OUR BONES, many of us suspect that the barrage of sales promotions we see in stores and online have to be a trick in some way ... we just don’t know exactly how. Add to that the desire—and need—we have to pay a low or at least fair price for products we want for ourselves or as gifts at the holidays. Starting with Black Friday (this year Nov. 23), then on to Cyber Monday (Nov. 26), retailers use sales come-ons to ignite our holiday shopping spirit—and to get us to loosen our grip on our wallets.

Shopping can be fun or exhausting or both, depending on who you are and what’s going on in your life. Regardless, the need to scrutinize sales deals and be a careful shopper is more important today than it ever was, given the ease of our “buy with one click” shopping culture. Class-action lawsuits filed by consumers over allegedly deceptive pricing practices have been on the rise recently. Since 2014, more than 150 lawsuits have been brought against more than 80 retailers, alleging that they duped consumers through false price advertising, says Stephanie Sheridan, a partner with law firm Steptoe & Johnson in San Francisco, where she represents retailers.

The timeless strategy of discounting is that stores hope to get us to buy impulsively rather than thoughtfully, lest we change our minds. And a lot of research shows that it works. “A sale sign causes a physiological arousal in our brains and clouds our reasoning,” says Kit Yarrow, professor emerita of psychology at Golden Gate University and author of “Decoding the New Consumer Mind: How and Why We Shop and Buy” (Jossey-Bass, 2014). “We become more competitive, emotional, and less rational when we see sales signs. As a result, we make some of our worst shopping decisions,” she says.

One of the most problematic sales practices in recent years concerns the legitimacy of “original” prices printed on price tags, says Meghan Stoppel, assistant attorney general and head of the consumer protection division in the Nebraska attorney general’s office. Federal and most state laws generally prohibit comparing a sale price against some other price (like a manufacturer’s suggested retail price, or MSRP; a competitor’s price; or some other former price), Stoppel says, unless that “anchor price” was offered to the public for some reasonable period. However, what exactly is a “reasonable period” has not been defined by the federal government, which leaves it up to each state to try and interpret what that means on a case-by-case basis, says attorney Sheridan. But if the anchor price was never available to consumers, there’s no real sale, and so the sale price is deceptive.

To check the legitimacy of discounts offered by 19 national retailers, Consumers’ Checkbook, an independent nonprofit advocacy group, tracked the prices of 20 big-ticket items sold for 10 months last year. It found that many of the items were advertised as on sale more than half of the time. And at a few chains—JCPenney, Kmart, Kohl’s, Macy’s, Neiman Marcus, and Sears—most items were offered at a discount every week or almost every week. In other words, the “regular price” listed on all those price tags was seldom, if ever, actually the price customers paid, according to the Consumers’ Checkbook report. Only two retailers, Bed Bath & Beyond and Costco, consistently offered legitimate sales.

In emailed statements, Sears, which also owns Kmart, disagreed that its pricing is misleading or deceptive, writing that “we are uniquely positioned to provide discounts to our members and customers in a number of different, legally compliant ways.” JCPenney said it was committed to “delivering the quality, price, and value that customers expect.” Macy’s affirmed that its sale pricing varies for each item depending on a number of factors. Kohl’s and Neiman Marcus did not return our request for a comment.

According to Sheridan, at the beginning of 2017, very few of the lawsuits filed against retailers had advanced past preliminary stages. But in January of that year, Amazon agreed to pay $1.1 million to resolve a suit brought by the Canadian Competition Bureau, a law enforcement agency that ensures businesses operate in a competitive manner, concerning pricing practices on its Canadian website. Per the Bureau’s report: “Amazon often compared its prices to a regular price—or ‘list price’—signaling attractive savings for consumers.” The agency concluded that these price comparisons led consumers to believe that prevailing list prices were higher than the prices they were being offered. And the investigation determined that Amazon failed to verify that the list prices its vendors supplied were, in fact, correct. At the time the settlement was announced, Amazon had already made changes to validate list prices provided by suppliers. Amazon declined to comment on the record.

On June 2 last year, the California Court of Appeals affirmed that Overstock.com had to pay $6.8 million in penalties. The major issue was Overstock’s use of “advertised reference...
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On June 2 last year, the California Court of Appeals affirmed that Overstock.com had to pay $6.8 million in penalties. The major issue was Overstock’s use of “advertised reference prices.” In this case, a comparison or reference price is a price that the retailer never charged when it advertised the price. Overstock was found to mislead consumers because it did not disclose that the advertised prices were not actual prices and did not accurately reflect the past prices of items. The agency concluded that the use of reference prices was misleading and deceptive. At the time the settlement was announced, Overstock had already changed its pricing practices to use a “last sale price” instead of a “reference price.” Overstock declined to comment on the record.
HOW TO MAKE SURE YOU NEVER OVERPAY

This holiday season there will be no shortage of sales come-ons from stores. The only way to know whether deals are real is to compare prices offered by other retailers. You can do a manual check of all the items you want at a variety of retailers, but this approach can be very time-consuming.

That’s why digital options offer a lot of convenience. But read the privacy and terms-of-use disclosures before using these tools to make sure you’re comfortable with the amount of information they collect. If you are, this arsenal of apps, alerts, and browser add-ons can help level the playing field, at least a bit. Here are some to consider, and when to employ them.

**Before You Buy**

**Price Alerts**
Enter items you’re searching for, and these apps will let you know when prices for the items have dropped.

**Examples:** InvisibleHand, PriceBlink, The Camelizer

**Price Comparison Apps**
Use these while shopping in stores to find better deals if they are available from competitors, often online but sometimes at local stores as well.

**Examples:** BuyVia, NowDiscount, ScanLife, ShopSavvy

**Browser Extensions**
These are plug-ins that you add to Chrome, Firefox, Safari, or almost any web browser—and most (including the ones listed here) are free. They scour the web for discounts, coupons, and deals to bring you the best prices every time you shop.

**Examples:** InvisibleHand, PriceBlink, The Camelizer

**While You Buy**

**Price Adjustment Apps**
These link to your email and search the web after you charge something and get an e-receipt. If the price drops on a purchased item, they initiate the refund, but you may have to supply bank and credit card info.

**Examples:** Earny, Moolah, Paribus, Slice

**After You Buy**

**Coupon Apps**
These send discounts online or to your phone to use when you check out in stores.

**Examples:** Coupon Sherpa, SnipSnap

prices,” which it labeled “list price,” “compare at,” or “compare.” The trial court found that Overstock had consistently used advertised reference prices created by various methods that were “designed to overstate the amount of savings to be enjoyed by shopping on the Overstock site.” When asked for comment, Overstock told us it had nothing further to add.

This past April, Neiman Marcus agreed to pay $2.9 million to settle a class-action lawsuit that alleged the company misled consumers at its Last Call stores in California by putting a false original price on price tags. The suit claimed that the goods were never actually offered for sale at the original price, as suggested by the price tag, and that the false higher price was designed to deceive consumers into believing they were getting a bargain by purchasing goods at Last Call. Neiman Marcus did not admit liability to any of the class-action lawsuit allegations. Michael Kors and Ann Taylor reached similar settlements in cases based on similar claims. Neither responded to our request for a comment.

In earlier, more costly settlements, JCPenney and girls’ clothing chain Justice agreed to pay $50 million and $50.8 million, respectively, to settle deceptive pricing class actions. In the JCPenney case, the plaintiffs alleged that the retailer tricked shoppers by displaying fake “original” prices on “sale” merchandise. JCPenney agreed to settle in September 2015, to avoid the risk of further litigation. In the Justice case, the plaintiffs said the retailer marked items as “40% off,” when in reality the items had never been offered for sale at the full advertised price. Justice denied all of the claims and says it did nothing wrong, but it agreed to settle the case in July 2016. Justice didn’t return our calls for comment. JCPenney emailed that it “uses a promotional
pricing model employed often in the retail industry."

To avoid lawsuits, retailers are refining some of their practices, says Yarrow, often by being more vague. "They may just cross out a higher price, or say 'Compare To' instead of 'Was,'" she says. Or they may put items on the sales floor priced high, knowing they won't sell many until they mark them down in a few weeks.

The bottom line: Never assume sale pricing is accurate, Yarrow says. "Consumers need to get away from thinking about bargains and instead carefully inspect merchandise and choose what they love, then evaluate if it's priced right by comparing it to what competitors are selling it, or similar items, for. And then they can decide to buy it or not."

ANCHOR PRICING ISSUES, UNFORTUNATELY, ARE NOT THE ONLY PROBLEMATIC SALES PRACTICES YOU NEED TO BE AWARE OF. OTHERS INCLUDE:

**Doorbuster Deals**

As you probably know, this practice occurs when stores open early to offer deep discounts on popular products in limited quantities. Though especially common on Black Friday, doorbusters can also take place at other times of the year, like during back-to-school season.

Advertising a sale while intending to stock a limited amount of—and therefore sell out of—an item advertised is legal in the U.S. if the retailer makes clear in its advertisements that quantities are limited, or by offering rain checks on sold-out items, Stoppel says. But the goal of these special low-price deals is to get customers to rush into the store to buy specific items on sale, then also to look around at what other items the store has to offer with fatter profit margins, says Paco Underhill, author of “Why We Buy: The Science of Shopping” (Simon & Schuster, 2008). "Unless there is something you genuinely need at a doorbuster sale and your research shows it is a really good price, I would say get a good night's sleep instead," he says. "When you shop when you are sleepy, your judgment is usually off."

**Buy One, Get One Free**

This is sometimes shortened to BOGO. Frequent shoppers are so accustomed to it, they know it by the acronym. The deal is sometimes structured as “buy one, get one free” and sometimes as “buy one, get one for 50% off” or some other amount. "We get excited by the prospect of a big price reduction, so we don’t do the math very carefully on these sales,” says Vicki Morwitz, professor of marketing at New York University's Stern School of Business. "We think we’re getting a 50 percent discount off the entire order, but of course we’re not.” For example, say the item is $80. Purchasing two on a buy one, get one sale will cost $120 ($80 + $40) instead of $160, which is a 25 percent discount from the “regular” total price. If the deal is buy one, get one half off, it’s usually the lower price of the two that gets the 50 percent reduction. So if the first item is $80 and the second is $40, then you'll pay $100 instead of $120, and your discount is only 17 percent.

**Bait and Switch**

Here’s how this works: First, you are “baited” by merchants who are advertising products or services at a low price, but when you visit the store, you discover that the advertised goods are not available or you are pressured by sales people to consider similar but higher-priced items (the “switch”). According to Stoppel, U.S. courts have held that the retailer using a bait-and-switch operation may be subject to a lawsuit by customers for false advertising and can be sued for trademark infringement by competing manufacturers, retailers, and others who profit from the sale of the product used as bait.

**Going-Out-of-Business Sales**

In most going-out-of-business sales, the business is not in charge of running the sale. Instead, the company will sell off all of its products to third-party liquidators; these liquidators then hold the sale, according to the Federal Trade Commission. Because the manufacturer’s suggested retail price is higher than what stores typically charge, liquidators may use it as the starting point when they figure the discount to offer. In this way, the “sale” price could be higher than the price at which an item was available before the going-out-of-business sale began.

Gift certificates, coupons, or store credits are generally no use to you in a liquidation sale: Liquidation firms most often won’t honor them. So if you hear a store is going out of business, act fast to use those before it actually closes up shop. In addition, it is probable that a “no refunds or returns” policy will be in force, so it is important that you carefully inspect merchandise before buying if you shop a sale. Double check that the product comes with its instructions and warranty cards, especially if you’re buying appliances and electronics.

Some states limit how long a seller can advertise that it’s going out of business, according to the FTC. For example, sales might be limited to 30 days unless the seller applies for, and is granted, an extension. That helps protect customers from being duped by never-ending going-out-of-business sales, the FTC says.
This HP has a low price but handles basic computing tasks well. Its 1-terabyte hard drive provides ample storage, the Intel Core i5 is the processor we’d choose for most users, and you get 8 gigabytes of memory. But a solid-state drive would make this machine faster, and other laptops have sharper displays.

Budget Performer

HP 15-BS115DX
$470

OVERALL SCORE
56

This HP has a low price but handles basic computing tasks well. Its 1-terabyte hard drive provides ample storage, the Intel Core i5 is the processor we’d choose for most users, and you get 8 gigabytes of memory. But a solid-state drive would make this machine faster, and other laptops have sharper displays.
Two-in-one convertibles such as the Samsung Notebook 7 Spin can be used like a traditional laptop or folded back to become a tablet. In terms of specs, the Notebook 7 Spin has an Intel Core i5, 8 gigabytes of memory, and a 256GB solid-state drive—it’s speedy and powerful. The display is 1920x1080: full high-definition but not 4K. That helps keep the price down, and it works just fine for most consumers.
Laptops long ago replaced desktops as the go-to computer for most consumers. And many of today’s laptops are lighter and more capable than earlier models. For just a few hundred dollars, you can pick up a laptop that streams video from Netflix, handles spreadsheets, and breezes through basics such as writing emails and browsing news sites.

“You’re going to be floored by the new laptops if you haven’t bought a computer recently,” says Richard Fisco, an electronics testing program leader at Consumer Reports.

But computer shopping can be a confusing and jargon-heavy experience. When you buy a laptop, you often face decisions about individual components in the device. Will you benefit from the most advanced Intel Core i9 processor? Will you be happier with a traditional hard drive, or should you spring for one of the newer solid-state drives? And which screen, or display, resolution is best: high-definition or Ultra High Definition (4K)? A few key decisions can cost—or save—hundreds of dollars, even between similar-looking machines.

To help, we’re going to look at each laptop component separately, answering a basic question: What’s the best choice for most people?

Are Hard Drives Gone?

Instead of a traditional hard drive, many of today’s laptops have a solid-state drive, or SSD. An SSD doesn’t have to spin a disk like an old-fashioned LP to retrieve data, which means it can copy Word files or open apps quickly. Compared with a conventional hard drive, SSDs save on battery life, too. And they may last longer because they have no moving parts to wear out.

The catch? SSDs are expensive, and they tend to store less data. Laptops with older hard drives often have at least a terabyte, or TB, of storage, which is 1,024 gigabytes. Only the priciest laptops have 1TB SSDs.

**The best choice for most people:** An SSD is a worthwhile upgrade, Fisco says—the advantage in speed will be noticeable. And if you’re looking for a lightweight, high-performing laptop, all your options may come with SSDs.

However, the choice ultimately depends on your priorities: You can save money by buying a laptop with a traditional hard drive. It will be heavier and slower, but as a bonus you’ll get more storage.

How Much Storage Do I Need?

Even laptops with SSDs vary a lot in how much storage they provide. These days, many of the biggest files on home computers are photos and videos, transferred from cameras and smartphones that shoot in Ultra HD (4K) resolution. Ten minutes of 4K video of the kids recorded with your iPhone can eat up nearly 2GB, according to Apple. Music collections can also take up a lot of space. These points argue for choosing the biggest possible hard drive, right?

But if you use Apple Music or Spotify, you might not want to store thousands of music files on your computer. And Apple’s iCloud, Google Photos, and Microsoft OneDrive will help you offload your pictures, too. Apple, for example, gives you 5GB of storage free of charge; $10 per month will get you 2TB. And you can get unlimited free storage on Google Photos if the images are 16 megapixels or less in resolution—fine for most uses, according to CR testers.

**The best choice for most people:** 256GB of storage is what CR testers recommend. “If you’re good with storing...”
**Travels Light**

LG Gram 13
$1,200

80
OVERALL SCORE

The 13-inch Gram laptop stands out for being lightweight and highly portable. It’s just 2.1 pounds of feathery technology, packed with a very capable Intel Core i5, 8 gigabytes of memory—plenty for most consumers—and a fast solid-state drive. Plus, the Gram’s long battery life (16.25 hours in CR testing) makes it an even more compelling travel companion.

**A Sight to Behold**

MacBook Pro
$1,800

83
OVERALL SCORE

This 13-inch MacBook Pro combines top-notch performance, superb display quality, and a premium price. Like many laptops CR recommends, it has an i5 processor, 8 gigabytes of memory, and a 256GB solid-state drive. The display earns a score of Excellent, with accurate colors, and the battery lasts almost 18 hours in CR testing.
stuff online,” Fisco says, “you don’t need to have a lot of storage on your laptop.” That 256GB is enough for macOS or Windows operating systems (which take up a minimum of 20GB on their own), plus a full assortment of applications and a variety of files. If you don’t need to store many photos, videos, or music files, you can make do with 128GB—which could save you about $100.

How Have Chips Changed?
Processors, aka CPUs or chips, are the brains of any laptop. The majority of mainstream laptops in stores and Consumer Reports’ ratings use Intel Core processors, although you’ll also find laptops with less expensive Intel Celeron or Pentium processors, and processors made by AMD.

There are primarily four Core models, but they have one thing in common: They combine multiple processing units, or “cores,” on the same CPU. These chips are, from least to most powerful, the Core i3, i5, i7, and i9. The Core i7 and Core i9 are aimed at professionals and demanding gamers, so everyday consumers can safely focus their attention on the i3 and i5.

The Best Choice for Most People: The Core i5 can handle everything most users will throw at it, and more. The i5 is a “quad-core chip,” with four separate processing units.

“You can think of it like having multiple workers,” says Antonette Asedillo, who oversees computer testing for Consumer Reports. “Each worker can be assigned a portion of a project and work simultaneously, making the process more efficient.” Not all applications take advantage of the multiple cores to speed their operations, but many do.

The Intel Core i3 is no slouch, and it would work fine for most consumers. But we’ve found that it tends to wind up in laptops with lower-end specs, such as older mechanical hard drives and smaller amounts of memory.

Do I Need Massive Memory?
After wading through multicore processors and solid-state drives, it might be a relief to hear that things are simpler with computer memory, or RAM. The basics haven’t changed in decades: Memory is where your computer temporarily stores files that it’s working on. Generally, more RAM makes things run faster. But if you’re just using a browser and reading email, you need less memory than if you’re using big graphics programs.

The Best Choice for Most People: 8GB is the sweet spot, our testers say. That lets you keep multiple tabs open in Chrome while also listening to music in Spotify, for example. Even “heavier” apps, such as Photoshop, will usually run fine with 8GB. But if you’re a gamer or graphic designer, go for 16GB.

Should I Get a 4K Display?
Almost all larger TVs come with 4K screens these days, and so do a lot of high-end laptops. These screens have four times as many pixels as HD (high-definition) screens, and there are advantages to that: Everything will look somewhat sharper, it makes it easier for avid photographers to make precise edits to their photos, and many games and movies may look more detailed.

But there are downsides, too: 4K displays can cost hundreds more and make your battery drain faster.

The Best Choice for Most People: A full HD display (with 1920x1080 resolution) is the best bet, our experts say. On a laptop’s small screen, the difference in sharpness is subtle, and for most people the savings in money and battery life are probably more important. But if you buy a high-end machine with an advanced CPU and lots of memory, a 4K screen may just come with it.

In that case, relax and enjoy the added sharpness.
Ratings  Laptop Lowdown Now it’s even easier to choose a high-quality laptop using Consumer Reports’ ratings—the Overall Score combines our traditional lab results with predicted-reliability and owner-satisfaction marks based on surveys of CR members.

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<td>13.75</td>
<td>2.8</td>
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<td>10.5</td>
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<td><strong>12</strong> Asus Q325UA-BI7T21</td>
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<td><strong>13</strong> Microsoft Surface Book 2</td>
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<td><strong>14</strong> Microsoft Surface Laptop (Core i5, 128GB)</td>
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<td><strong>18</strong> Microsoft Surface Pro (Core m3, 128GB)</td>
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<td>9.5</td>
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</tr>
</tbody>
</table>

**12- TO 13-INCH LAPTOPS**

**14-INCH LAPTOPS**

*C=convertible. D=detachable.
HOW WE TEST:

Portability is based on battery life, size, and weight, including the keyboard dock for detachable laptops. For Performance we evaluate how well the model operates while running apps and 3D games, and browsing the web. Versatility assesses technical support, warranty provisions, and useful hardware features such as memory card slots and audio/video connections. The Display score looks at size, color, brightness, and glare. Overall Score combines test results with survey data for predicted reliability and owner satisfaction. Predicted reliability estimates the likelihood that newly purchased models from a given brand will break within the first three years. Owner satisfaction reflects the proportion of CR members who are extremely likely to recommend the laptop they bought.

In cases where we have insufficient survey data to provide a brand-level rating, indicated by a gray dash (−), we assume the model has average reliability and satisfaction.

<table>
<thead>
<tr>
<th>Recommended Rank</th>
<th>Brand &amp; Model</th>
<th>Overall Score</th>
<th>Price</th>
<th>Survey Results</th>
<th>Test Results</th>
<th>Features &amp; Specs</th>
</tr>
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<tbody>
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</tr>
</tbody>
</table>

All-Access or Digital members can find the latest ratings at CR.org/laptops1218.
THE VITAL STATISTIC

17%

Percentage reduction in crashes because of the use of rearview cameras. They are now required on all cars built after April 2018, in part due to CR’s advocacy efforts.

Source: Insurance Institute for Highway Safety.

TIPS FROM OUR TEST TRACK

WHAT’S THIS BUTTON DO?

See that button on your dash with what looks like a swerving car on it? Many drivers press it thinking that it activates the electronic stability control (ESC) safety system. But pressing it will actually turn that function off. The ESC safety system is automatically engaged every time you start your car. (When ESC is active, the button will not be illuminated, which might be why drivers find it counterintuitive.) When active, ESC applies braking to individual wheels to help keep a car under control on, say, a slippery road.

What to do: Dealers will update software to fix the problem. Call Cadillac (800-458-8006), Chevrolet (800-222-1020), or GMC (800-462-8782) for further information.

ASK OUR EXPERTS

I’m tired of drivers taking to roadways with snow all over their cars. Aren’t there any rules?

In some states, including Connecticut and New Jersey, you can be fined for not removing snow and ice from your car. Snow can dislodge and obscure your view or the view of another driver, and ice that flies off can shatter another driver’s windshield. For everyone’s safety, be sure to also clear the ice and snow from your car’s rearview camera and sensors on the grille, bumpers, and rear-body quarter panels to ensure that they’re working properly.

RECALLS

GM TRUCKS & SUVS

General Motors is recalling more than 1 million trucks and SUVs because the power steering can briefly fail. Vehicles include the 2015 Chevrolet Silverado 1500 and GMC Sierra 1500 trucks, and the Cadillac Escalade, Chevrolet Suburban and Tahoe, and GMC Yukon SUVs.

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STAY AHEAD OF THE CURVE WITH CR AUTO RATINGs, NEWS & ADVICE™

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Cars You Can Count On

Our exclusive reliability data can point you to the brands and models you can depend on—and those you should steer clear of.

by Jonathan Linkov

**MOST RELIABLE**

<table>
<thead>
<tr>
<th>Model</th>
<th>Predicted Reliability Score</th>
<th>Overall Score</th>
<th>Price as Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEXUS RX</td>
<td>95</td>
<td>77</td>
<td>$58,428</td>
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<tr>
<td>TOYOTA PRIUS C</td>
<td>93</td>
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<td>$20,850</td>
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<tr>
<td>TOYOTA PRIUS PRIME</td>
<td>91</td>
<td>78</td>
<td>$29,889</td>
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<tr>
<td>TOYOTA MX-5 MIATA</td>
<td>89</td>
<td>83</td>
<td>$29,905</td>
</tr>
<tr>
<td>TOYOTA COROLLA (SEDAN)</td>
<td>89</td>
<td>79</td>
<td>$20,652</td>
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</table>

**LEAST RELIABLE**

<table>
<thead>
<tr>
<th>Model</th>
<th>Predicted Reliability Score</th>
<th>Overall Score</th>
<th>Price as Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAM 3500</td>
<td>9</td>
<td>56</td>
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<tr>
<td>TESLA MODEL X</td>
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<td>53</td>
<td>$34,290</td>
</tr>
<tr>
<td>CADILLAC ATS</td>
<td>14</td>
<td>53</td>
<td>$49,945</td>
</tr>
<tr>
<td>HENDA CLARITY</td>
<td>9</td>
<td>64</td>
<td>$34,290</td>
</tr>
<tr>
<td>CHEVROLET TRAVERSE</td>
<td>14</td>
<td>64</td>
<td>$49,945</td>
</tr>
</tbody>
</table>

Note: Each model has at least two years of data.
**YOU WANT** a new car but don’t want to get burned. Consumer Reports is here to help. Our exclusive annual Auto Reliability Survey—data from CR members on more than 500,000 vehicles—will help you figure out which new cars, minivans, SUVs, and trucks are more likely to have reliability problems and give you a headache.

So what should you do? For starters, avoid brand-new or redesigned models. Wait until later model years, when an automaker has worked out the kinks. Steer clear of models that aren’t recommended, including the ones that lost their CR recommendation this year (below). Also avoid those on the list of the least reliable models. Focus instead on vehicles that are recommended, including the new entries below or those on our list of the most reliable.

Our prediction of new-car reliability is a key element in CR’s Overall Score, which also includes road-test performance, owner satisfaction survey results, whether a vehicle comes with key safety systems, and results from crash tests, if applicable. Vehicles with the highest Overall Scores in their category get CR’s recommendation.

We contacted carmakers with vehicles that lost a recommendation this year. For their responses, go to CR.org/reliability.

---

**Newly Recommended Models With Improved Reliability**

- Cadillac XTS
- Chevrolet Cruze, Chevrolet Suburban, Chrysler 300, Dodge Charger, Infiniti QX60, Lincoln Continental, Mazda CX-9, Mazda MX-5 Miata, Mini Cooper, Mini Countryman, Nissan Armada, Nissan Maxima, Subaru Impreza, Volkswagen Golf, Volkswagen Tiguan

**No Longer Recommended Models With Declining Reliability**

- BMW X1, BMW X3, Chrysler Pacifica, Ford Fusion, Genesis G90, Honda Clarity, Honda Odyssey, Kia Cadenza, Lincoln MKZ, Mazda CX-3, Mercedes-Benz E-Class, Tesla Model S
Troubles With Turbo

AUTOMAKERS are dropping more turbocharged engines under the hoods of their latest models as they try to boost fuel efficiency without sacrificing engine performance.

Smaller turbocharged engines appeal to consumers and auto companies because they offer the promise of more power but with the fuel efficiency of a smaller engine. Automakers also like them because they see turbos as a way to help meet government fuel-economy standards.

That might sound like a win-win situation, except not all automakers are making high-quality turbo engines, according to data from our annual Auto Reliability Survey, which polls CR members about their experience with more than 500,000 cars, minivans, SUVs, and trucks. Consumers should be aware of potentially problematic turbos when shopping for a new car.

“Small turbo engines can save gas while delivering the power people want, but only if the engines are reliable,” says Jake Fisher, director of auto testing for Consumer Reports. “Sometimes the added complexity means trouble arises down the road.”

Our survey data show that many turbo engines are highly effective and reliable. But some CR members reported problems with certain turbocharged engines when compared with nonturbo engines, including problems with the turbochargers and engine computers. A few members also told us they needed engine replacements.

Turbochargers work by forcing air into an engine on demand, which burns more gas and creates more power but only when it’s needed, potentially saving fuel. They’re also increasingly paired to high-tech transmissions with eight, nine, even 10 gears, which also can help fuel efficiency.

Many new engines with these problems are likely to be under warranty, but there’s still a hassle factor when a car doesn’t work like it should. And there’s also time lost to repairs.

According to our survey, some owners reported various concerns with the 3.0-liter turbo V6 engine in the Lincoln MKZ sedan, and with the Hyundai Tucson’s 1.6-liter turbocharged four-cylinder engine. With that engine, Hyundai uses a seven-speed transmission to save gas and improve performance. Some members also told us that the transmission had problems.

There hasn’t been a common thread to explain the problems, but new engine technologies can falter in their first few years. “Truth is, when automakers introduce such new technology, it can take several model years to get it working correctly,” Fisher says. He adds that automakers with more experience building turbos tend to have fewer problems. “Audi has been building turbo engines since the 1980s, and our survey data show its 2.0-liter turbo engines have been reliable.”

Of the automakers with problems mentioned here, only Hyundai provided comment to CR. In an email, the automaker said it’s “aware of the issues reported by Consumer Reports’ members. Hyundai recommends that any customer that has any concerns with their vehicle bring it into a dealership for evaluation.”

Shoppers in the market for a new car should check CR’s reliability predictions before buying.
The Powertrain Problem Index is for each engine and transmission combination within a brand. It is based on data from the 2016, 2017, and 2018 model years from CR’s most recent annual Auto Reliability Survey. The vertical line is the average value of all nonturbo vehicles in CR’s survey. Each brand is ranked by how much its turbocharged powertrains deviated from the overall average. Multiple dots in the line indicate other turbocharged engines offered by the automaker.

Powertrain Problems

More than half of new U.S. models offer turbo engines as an option. As they become more popular, along with multispeed transmissions, it’s clear from CR reliability data that not every automaker gets its turbos and transmissions right. Check this chart to see which car companies are consistently building quality powertrains and which you should avoid for now.
What Will Need the Most Repairs

We asked CR members to tell us about any problems with their vehicles in these 17 areas over the previous 12 months. Below is a ranking of trouble spots, from most to least problematic. Because new cars generally have fewer complications, we based the ranking on the average problem rates for the 2016 model year.
## ALL-NEW AND REDESIGNED MODELS

CR provides reliability ratings for models that are brand-new, redesigned for 2019, or with limited data. To make these predictions, our auto experts look at the overall history of how a brand has performed and the reliability of the previous generation of the model, if there was one. We also make our judgments by looking at similar models or ones that share components.

We don't score new or redesigned vehicles on a 0-to-100 scale, but we give them a general reliability rating based on our analysis.

### SUBCOMPACT SUVs
- Mitsubishi Outlander Sport
- Ford EcoSport
- Hyundai Kona
- Fiat 500X

### COMPACT SUVs
- Subaru Forester
- Toyota RAV4
- Mitsubishi Eclipse Cross

### MIDSIZED SUVs
- Subaru Ascent
- Hyundai Santa Fe
- Chevrolet Blazer
- Jeep Wrangler

### LARGE SUVs
- Ford Expedition

### LUXURY ENTRY-LEVEL SUVs
- Lexus UX
- Audi Q3
- Infiniti QX30
- Volvo XC40

### SUBCOMPACT CARS
- Chevrolet Sonic
- Chevrolet Spark
- Hyundai Accent
- Kia Rio
- Mitsubishi Mirage
- Fiat 500
- Nissan Versa

### COMPACT CARS
- Toyota Corolla Hatchback
- Kia Forte

### LUXURY COMPACT CARS
- Mini Clubman
- Nissan Kicks
- Volkswagen Jetta
- Fiat 500L

### LUXURY MID-SIZED CARS
- Land Rover Discovery
- Land Rover Range Rover Velar
- BMW X5
- BMW X6
- Land Rover Discovery
- Land Rover Range Rover
- Land Rover Range Rover Sport
- Maserati Levante

### LUXURY LARGE CARS
- Toyota Avalon
- Kia K900
- Lexus LX
- Toyota Land Cruiser
- Infiniti QX80
- Lincoln MKT
- Lincoln Navigator

### HYBRIDS/ELECTRIC CARS
- Toyota Mirai
- Honda Insight

### COMPACT PICKUPS
- Ford Ranger

### FULL-SIZED PICKUPS
- Chevrolet Silverado 1500
- GMC Sierra 1500
- Ram 1500

### SPORTS/SPORTY CARS
- Hyundai Veloster
- Nissan Z
- Fiat 124
- Audi TT
- Lexus LC
- BMW 6 Series
- Mercedes-Benz SL
- Mercedes-Benz SLC
- Porsche 718 Boxster
- Porsche 718 Cayman
- Alfa Romeo 4C
- Jaguar F-Type

### MINIVANS
- Ford Transit Connect

### WAGONS
- Buick Regal TourX
- Volvo V60

### ULTRA-LUXURY CARS
- Lexus LS
- Porsche Panamera
- Jaguar XJ
- Audi A8
- Volvo S90
- Mercedes-Benz CLS

### LUXURY COMPACT CARS CONT.
- Buick Regal
- Genesis G70
- Jaguar XE
- Volvo S60

### LUXURY MID-SIZED CARS CONT.
- Mercedes-Benz CLA
- Mercedes-Benz A-Class
- Mercedes-Benz E-Class
- Mercedes-Benz C-Class
- Porsche 718 Boxster
- Porsche 718 Cayman
- Alfa Romeo 4C
- Jaguar F-Type

### ULTRA-LUXURY CARS CONT.
- Audi A8
- Volvo S90
- Mercedes-Benz CLS
Consumer Reports asks its members each year about problems with their cars, minivans, SUVs, and trucks. This year, CR’s Auto Reliability Survey—the largest of its kind—gathered data on more than 500,000 vehicles. We analyzed 17 trouble areas (see page 58) and created an overall reliability score for each model year. Our predictions for the 2019 models are based on overall reliability for the past three model years, provided the vehicle hasn’t changed much. The charts here present a predicted reliability score: 41-60 is average, 61-80 is better than average, and 21-40 is worse than average. Predictions for new and redesigned models or for those that have limited data can be found on page 59.
<table>
<thead>
<tr>
<th>COMPACT CARS</th>
<th>LUXURY COMPACT CARS Cont.</th>
<th>MINIVANS</th>
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</thead>
<tbody>
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<td>Kia Sedona</td>
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<tr>
<td>Toyota C-HR</td>
<td>Toyota C-HR</td>
<td>Toyota Sienna</td>
</tr>
<tr>
<td>Mazda 3</td>
<td>Mazda 3</td>
<td>Dodge Grand Caravan</td>
</tr>
<tr>
<td>Hyundai Elantra</td>
<td>Hyundai Elantra</td>
<td>Chrysler Pacifica</td>
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<tr>
<td>Kia Soul</td>
<td>Kia Soul</td>
<td>Honda Odyssey</td>
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<td>Subaru Outback</td>
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<td>Subaru Legacy</td>
<td>Genesis G80</td>
<td>Audi Allroad</td>
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<tr>
<td>Kia Optima</td>
<td>BMW 5 Series</td>
<td>Volkswagen Golf Alltrack</td>
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<tr>
<td>Volkswagen Passat</td>
<td>Cadillac XTS</td>
<td>Volkswagen Golf SportWagen</td>
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<tr>
<td>Hyundai Sonata</td>
<td>Lexus GS</td>
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<td>Toyota Camry</td>
<td>Infiniti Q70</td>
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<tr>
<td>Honda Accord</td>
<td>Buick LaCrosse</td>
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<tr>
<td>Ford Fusion</td>
<td>Cadillac CT6</td>
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<tr>
<td>Chevrolet Malibu</td>
<td>Mercedes-Benz E-Class</td>
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<tr>
<td></td>
<td>Mercedes-Benz ATS</td>
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<tr>
<td></td>
<td>Lincoln MKZ</td>
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<tr>
<td></td>
<td>Volvo S90</td>
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<table>
<thead>
<tr>
<th>LARGE CARS</th>
<th>ULTRA-LUXURY CARS</th>
<th>COMPACT PICKUPS</th>
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<tbody>
<tr>
<td>Ford Taurus</td>
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<td>Nissan Frontier</td>
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<td>Dodge Charger</td>
<td>Lincoln Continental</td>
<td>Honda Ridgeline</td>
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<td>Chevrolet Colorado</td>
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<td>Toyota Avalon</td>
<td>GMC Canyon</td>
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<td>Chrysler 300</td>
<td>Lincoln MKX</td>
<td>Toyota Tacoma</td>
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</table>

<table>
<thead>
<tr>
<th>LUXURY ENTRY-LEVEL CARS</th>
<th>SPORTS/SPORTY CARS UNDER $40,000</th>
<th>FULL-SIZED PICKUPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acura ILX</td>
<td>Mazda MX-5 Miata</td>
<td>Toyota Tundra</td>
</tr>
<tr>
<td>Audi A3</td>
<td>Subaru BRZ</td>
<td>Ram 2500</td>
</tr>
<tr>
<td></td>
<td>Toyota 86</td>
<td>Ford F-250</td>
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<tr>
<td></td>
<td>Buick Cascada</td>
<td>Ford F-150</td>
</tr>
<tr>
<td></td>
<td>Volkswagen GTI</td>
<td>Ram 1500 Classic</td>
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<tr>
<td></td>
<td>Subaru WRX</td>
<td>Chevrolet Silverado 3500HD</td>
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<tr>
<td></td>
<td></td>
<td>GMC Sierra 3500HD</td>
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<td></td>
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<td>Ford F-350</td>
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<td></td>
<td></td>
<td>Chevrolet Silverado 1500 LD</td>
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<tr>
<td></td>
<td></td>
<td>GMC Sierra 1500 Limited</td>
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<td></td>
<td></td>
<td>Nissan Titan</td>
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<td>Chevrolet Silverado 2500HD</td>
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<td></td>
<td></td>
<td>GMC Sierra 2500HD</td>
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<td></td>
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<td>Ram 3500</td>
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<table>
<thead>
<tr>
<th>LUXURY COMPACT CARS</th>
<th>SPORTS/SPORTY CARS OVER $40,000</th>
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<tr>
<td>Audi A4</td>
<td>Lexus RC</td>
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<tr>
<td>BMW 3 Series</td>
<td>Infiniti Q60</td>
<td></td>
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<tr>
<td>Lexus IS</td>
<td>Porsche 911</td>
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<tr>
<td>Kia Stinger</td>
<td>BMW 4 Series</td>
<td></td>
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<tr>
<td>Tesla Model 3</td>
<td>BMW 2 Series</td>
<td></td>
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<tr>
<td></td>
<td>Audi A5</td>
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<td>Chevrolet Camaro</td>
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<td></td>
<td>Dodge Challenger</td>
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<td>Ford Mustang</td>
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<tr>
<td></td>
<td>Chevrolet Corvette</td>
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</table>

DECEMBER 2018  CR.ORG  CRM12_Road Report Reliability [P]_2764789.indd   61  10/12/18   5:14 PM
Our brand rankings are based on the average reliability for vehicles in a lineup. Below, we also list the most and least reliable vehicle in each brand lineup. Buick fell 11 spots, the biggest decline, due to worse-than-average reliability for its Enclave SUV. Mazda moved the most, up nine spots, mostly due to reliability gains for the CX-9 and MX-5 Miata. To be included here, a brand must have sufficient data for at least two vehicles. CR lacks data to rank Alfa Romeo, Fiat, Jaguar, Land Rover, Maserati, Mitsubishi, or Smart. For more details on reliability, go to CR.org/reliability.

### BRAND WINNERS AND LOSERS

<table>
<thead>
<tr>
<th>Brand (Number of Models)</th>
<th>Rank Change From Last Year</th>
<th>Least Reliable</th>
<th>Range of Predicted Reliability Scores (Brand Average in Colored Circles)</th>
<th>Most Reliable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 LEXUS [6]</td>
<td>▲1</td>
<td>IS</td>
<td>76 – 78 (Brand Average in Colored Circles)</td>
<td>QX</td>
</tr>
<tr>
<td>2 TOYOTA [14]</td>
<td>▼1</td>
<td>Prius C</td>
<td>76 – 78 (Brand Average in Colored Circles)</td>
<td>IS</td>
</tr>
<tr>
<td>3 MAZDA [6]</td>
<td>▲9</td>
<td>CX-3</td>
<td>67 – 76 (Brand Average in Colored Circles)</td>
<td>WRX</td>
</tr>
<tr>
<td>4 SUBARU [6]</td>
<td>▲2</td>
<td>Crosstrek</td>
<td>65 – 76 (Brand Average in Colored Circles)</td>
<td>WRX</td>
</tr>
<tr>
<td>5 KIA [8]</td>
<td>▲1</td>
<td>Cadenza</td>
<td>64 – 67 (Brand Average in Colored Circles)</td>
<td>Q50</td>
</tr>
<tr>
<td>6 INFINITI [4]</td>
<td>▲1</td>
<td>Q50</td>
<td>64 – 67 (Brand Average in Colored Circles)</td>
<td>Sedona</td>
</tr>
<tr>
<td>7 AUDI [6]</td>
<td>▼3</td>
<td>A3</td>
<td>60 – 64 (Brand Average in Colored Circles)</td>
<td>Q60</td>
</tr>
<tr>
<td>8 BMW [7]</td>
<td>▼3</td>
<td>X1</td>
<td>60 – 64 (Brand Average in Colored Circles)</td>
<td>i3</td>
</tr>
<tr>
<td>9 MINI [2]</td>
<td>NA</td>
<td>Ionq</td>
<td>57 – 60 (Brand Average in Colored Circles)</td>
<td>Santa Fe XL</td>
</tr>
<tr>
<td>10 HYUNDAI [5]</td>
<td></td>
<td>Cadenza</td>
<td>57 – 60 (Brand Average in Colored Circles)</td>
<td>G90</td>
</tr>
<tr>
<td>11 PORSCHE [3]</td>
<td>▲2</td>
<td>Cayenne</td>
<td>54 – 57 (Brand Average in Colored Circles)</td>
<td>G80</td>
</tr>
<tr>
<td>12 GENESIS [2]</td>
<td>NA</td>
<td>Versa Note</td>
<td>51 – 54 (Brand Average in Colored Circles)</td>
<td>ILX</td>
</tr>
<tr>
<td>13 ACURA [2]</td>
<td>▲6</td>
<td>Clarity</td>
<td>51 – 54 (Brand Average in Colored Circles)</td>
<td>Maxima</td>
</tr>
<tr>
<td>14 NISSAN [11]</td>
<td>▼3</td>
<td>Versa Note</td>
<td>51 – 54 (Brand Average in Colored Circles)</td>
<td>Fit</td>
</tr>
<tr>
<td>15 HONDA [9]</td>
<td>▼6</td>
<td>Atlas</td>
<td>50 – 53 (Brand Average in Colored Circles)</td>
<td>Passat</td>
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<tr>
<td>16 VOLKSWAGEN [8]</td>
<td></td>
<td>E-Class</td>
<td>47 – 50 (Brand Average in Colored Circles)</td>
<td>GLS</td>
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<tr>
<td>17 MERCEDES-BENZ [7]</td>
<td>▼3</td>
<td>CLS</td>
<td>47 – 50 (Brand Average in Colored Circles)</td>
<td>Taurus</td>
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<tr>
<td>20 LINCOLN [4]</td>
<td>▲2</td>
<td>MKZ</td>
<td>43 – 46 (Brand Average in Colored Circles)</td>
<td>Continental</td>
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<tr>
<td>21 DODGE [5]</td>
<td>▼3</td>
<td>Journey</td>
<td>40 – 43 (Brand Average in Colored Circles)</td>
<td>Charger</td>
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<tr>
<td>22 JEEP [4]</td>
<td>▼2</td>
<td>Compass</td>
<td>40 – 43 (Brand Average in Colored Circles)</td>
<td>Renegade</td>
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<tr>
<td>23 CHEVROLET [16]</td>
<td>▼5</td>
<td>Traverse</td>
<td>39 – 42 (Brand Average in Colored Circles)</td>
<td>Impala</td>
</tr>
<tr>
<td>24 CHRYSLER [2]</td>
<td>▼7</td>
<td>Pacifica</td>
<td>39 – 42 (Brand Average in Colored Circles)</td>
<td>300</td>
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<tr>
<td>25 GMC [8]</td>
<td>▲1</td>
<td>Sierra 2500 HD</td>
<td>38 – 41 (Brand Average in Colored Circles)</td>
<td>300</td>
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<tr>
<td>26 RAM [3]</td>
<td>▼1</td>
<td>3500</td>
<td>37 – 40 (Brand Average in Colored Circles)</td>
<td>2500</td>
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<tr>
<td>27 TESLA [3]</td>
<td>▼6</td>
<td>Model X</td>
<td>34 – 37 (Brand Average in Colored Circles)</td>
<td>Model 3</td>
</tr>
<tr>
<td>28 CADILLAC [6]</td>
<td>▼1</td>
<td>ATS</td>
<td>32 – 35 (Brand Average in Colored Circles)</td>
<td>XT5</td>
</tr>
<tr>
<td>29 VOLVO [3]</td>
<td>▼6</td>
<td>S90</td>
<td>22 – 25 (Brand Average in Colored Circles)</td>
<td>XC60</td>
</tr>
</tbody>
</table>

Note: ▲ indicates the brand moved up from last year; ▼ indicates the brand moved down from last year; NA indicates the brand was not ranked last year; — indicates the ranking is unchanged from last year.

For a full list of vehicles, go to CR.org/reliability.
ROAD TEST

WE CONDUCT MORE THAN 50 TESTS ON EACH VEHICLE AT OUR 327-ACRE AUTO TEST CENTER. FOR COMPLETE ROAD TESTS, MEMBERS CAN GO TO CR.ORG/CARS.

MIDSIZED SUVs

Subaru Ascent
Quiet, Spacious, and Comfortable

ROAD-TEST SCORE 93

HIGHs Ride, quietness, interior room, visibility, braking, controls

LOWs Agility

POWERTRAIN 260-hp, 2.4-liter four-cylinder turbo engine; continuously variable transmission; all-wheel drive

FUEL 22 mpg on regular fuel

PRICE AS TESTED $43,867

SUBARU’S NEW THREE-ROW SUV, with its impressive all-around performance, has dethroned the Toyota Highlander, the long-time champion in the category. The gap between the two road-test scores is large enough to drive a truck through. The Ascent’s smooth ride, functional interior, and slick power delivery helped lift it to success.

Getting into the Ascent’s cabin is easy thanks to its large doors. The controls are simple to use and the infotainment touch screen responds quickly to commands. All trim levels come with Android Auto and Apple CarPlay compatibility. Most Ascents are fitted with second-row captain’s chairs, which provide plenty of legroom and can slide forward and back. Rear passengers get their own climate settings and USB ports. Even the foldaway third row is livable for adults on short trips.

The turbocharged four-cylinder engine is less powerful than most of the Ascent’s rivals, which might seem to be a competitive disadvantage. But in real-world driving, the SUV feels zippiest and more satisfying than its numbers suggest it should be.

The plush ride is even better than in some luxury cars. We noticed significant body lean through turns, but the SUV feels safe and remains under control. All Ascents come with Subaru’s Eyesight safety features, which include forward-collision warning, automatic emergency braking, and lane-keeping assist. Blind-spot warning, rear cross-traffic warning, and rear automatic braking are available.

COMPACT CARS

Volkswagen Jetta
Smart and Sensible

ROAD-TEST SCORE 78

HIGHs Controls, fuel economy, roomy cabin for the class

LOWs Agility, low dash vents, console rubs against knee

POWERTRAIN 147-hp, 1.4-liter four-cylinder turbo engine, 8-speed automatic transmission; front-wheel drive

FUEL 34 mpg on regular fuel

PRICE AS TESTED $23,325

THE REDESIGNED 2019 Jetta wins our praise for its impressive fuel economy, effortless acceleration, and straightforward controls.

We got 34 mpg overall and 54 mpg on the highway in our tests. Even with that superb fuel economy, the Jetta’s responsive turbo engine doesn’t force the driver to press hard on the gas pedal to make a smart getaway.

The suspension absorbs all but the sharpest bumps, and the quiet cabin blocks out most road and engine noise. But the Jetta’s uninspired handling makes for a dull driving experience. We think it’s less sporty than the Honda Civic, and it’s not as fun to drive as it used to be.

There’s a premium ambience to the cabin that’s helped by the faux leather seats and automatic climate control found on all but the base trim level. Every switch and button is easy to find and well-lit at night. Android Auto and Apple CarPlay compatibility is standard.

We like the Jetta’s excellent visibility and comfortable seating position for most drivers. But there are some ergonomic issues. The low-mounted center vents direct too much air toward the driver’s elbow rather than to the body and face, and the wide center console rubs against the driver’s knee.

The rear seat is generous for the class, and the trunk is huge.

Forward-collision warning, low-speed automatic emergency braking, and blind-spot warning are optional on the base S trim but standard on the SE trim and up.
Honda Insight
A New MPG Champion

**Road-Test Score 69**

**Highs** Fuel economy, ride

**Lows** Gear selector, controls, front-seat comfort, low stance

**Powertrain** 151-hp, 1.5-liter four-cylinder hybrid engine; continuously variable transmission; front-wheel drive

**Fuel** 54 mpg on regular fuel

**Price as tested** $24,995

The Insight is the new fuel-economy leader in CR’s testing. Its 54 mpg overall is the best of any non-plug-in hybrid we’ve tested and beats the Toyota Prius by 2 mpg. But despite that victory, the Insight trails the Prius in many ways.

The Insight is dragged down by some of the same quirks that plague other Hondas, including the Civic, the car the Insight is based on.

Its hybrid powertrain is fine in all-electric mode and at stop-and-go speeds. In fact, the Honda is quicker than the Prius. But when pushed hard, the engine ramps up with a loud drone.

There are other frustrations. Honda’s push-button gear selector requires too much attention to use. The EX trim’s 8-inch touch-screen infotainment hub has small on-screen buttons and lacks a tuning knob. And the car’s low stance makes it a challenge to enter and exit.

There are positives beyond the Insight’s fuel economy. The comfortable ride does a good job of soaking up bumps. Plus the rear-seat room is generous for a compact sedan, and the battery doesn’t steal any trunk space.

Forward-collision warning and automatic emergency braking are standard. The Insight lacks a blind-spot warning system; instead, it uses Honda’s LaneWatch, which only offers video showing the passenger side of the car instead of both sides.

Yes, the Insight costs less than the Prius, and its better mileage will save drivers some money. But overall, we still think a Prius is worth the extra expense.

**COMPACT CARS**

**Toyota Corolla Hatchback**
Affordable and Agile

**Road-Test Score 66**

**Highs** Handling, fuel economy, controls, braking

**Lows** Ride, engine noise, tight rear seat

**Powertrain** 168-hp, 2.0-liter four-cylinder engine; continuously variable transmission; front-wheel drive

**Fuel** 36 mpg on regular fuel

**Price as tested** $24,263

Our testers were pleasantly surprised by the Corolla’s tied-down handling. It’s fun and predictable through corners, and the steering conveys a sense of precision and control. Although the car’s ride is on the stiff side—it doesn’t smooth out bumps very well—it’s still on a par with most of its peers.

Our tested model managed an impressive 36 mpg overall, several mpg better than most competitors. But the engine has to be pushed hard to find real power, and it gets loud and raspy when that happens.

The infotainment screen and controls are easy to use, and Apple CarPlay and Amazon Alexa integration come standard. Alexa allows owners to prompt functions such as starting the car and adjusting the climate system from inside their house. Android Auto isn’t available.

The front-seat bolsters hug the driver nicely, but only the top XSE trim includes lumbar adjustment. Getting into the very tight rear seat is a chore.

The angle of the windshield pillars hurts front visibility, and the chunky roof pillars limit the rear view.

Forward-collision warning, automatic emergency braking with pedestrian detection, daytime cyclist detection, and lane-departure warning with steering assist come standard. Blind-spot warning is optional.

Fans of the Corolla should take note: This sporty little hatchback previews the coming redesigned 2020 sedan.
### Ratings New Contenders

See how the four vehicles we just tested fare when compared with the best in their categories. The Overall Scores below reflect updated CR reliability ratings. For more on reliability, see page 54.

<table>
<thead>
<tr>
<th>Make &amp; Model</th>
<th>Overall Score</th>
<th>Price</th>
<th>Survey Results</th>
<th>Safety</th>
<th>Road-Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COMPACT HYBRIDS</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Toyota Prius Three</td>
<td>77</td>
<td>$27,323</td>
<td>Std./Opt.</td>
<td>75</td>
<td>10.3 135 53.5</td>
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<tr>
<td>Honda Insight EX</td>
<td>70</td>
<td>$24,955</td>
<td>Std./Opt.</td>
<td>69</td>
<td>8.7   136 54.0</td>
</tr>
<tr>
<td>Kia Niro EX</td>
<td>68</td>
<td>$26,805</td>
<td>Opt.</td>
<td>65</td>
<td>9.9   143 51.0</td>
</tr>
<tr>
<td>Hyundai Ioniq SEL</td>
<td>57</td>
<td>$25,035</td>
<td>Opt.</td>
<td>67</td>
<td>9.9   144 51.5</td>
</tr>
</tbody>
</table>

| **COMPACT CARS**        |               |        |                |        |                   |
| Toyota Corolla LE (sedan) | 79         | $20,652| Std./Opt.      | 71    | 9.9   138 54.5     |
| Subaru Impreza Premium  | 78            | $23,410| Opt.           | 85    | 9.5   124 56.0     |
| Mazda3 Sport            | 76            | $21,740| Std./Opt.      | 72    | 8.3   133 54.5     |
| Volkswagen Golf SE      | 75            | $25,315| Std./Opt.      | 82    | 8.7   130 54.0     |
| Toyota Corolla Hatchback| 72            | $24,263| Std./Opt.      | 66    | 8.7   129 53.5     |
| Hyundai Elantra GT (2.0L) | 71         | $23,265| Opt.           | 79    | 8.7   127 54.5     |
| Honda Civic EX-T        | 71            | $23,035| Opt.           | 75    | 7.1   129 54.5     |
| Chevrolet Cruze LT (1.4T)| 71           | $23,145| Opt.           | 77    | 8.5   125 56.0     |
| Volkswagen Jetta SE     | 69            | $23,325| Opt.           | 78    | 9.0   135 52.0     |
| Hyundai Elantra SEL     | 66            | $20,090| Opt.           | 66    | 9.9   133 54.0     |
| Nissan Sentra SV        | 59            | $20,125| Opt.           | 62    | 10.4 129 56.0     |

| **MIDSIZED 3-ROW SUVs** |               |        |                |        |                   |
| Subaru Ascent Limited   | 88            | $43,867| Std./Opt.      | 93    | 8.0   129 52.0     |
| Toyota Highlander XLE (V6) | 85         | $41,169| Std./Opt.      | 82    | 7.4   134 48.5     |
| Mazda CX-9 Touring      | 81            | $40,470| Std./Opt.      | 80    | 7.9   139 50.0     |
| Hyundai Santa Fe XL SE (V6) | 79         | $36,290| Opt.           | 81    | 7.6   133 51.0     |
| Kia Sorento EX (V6)     | 78            | $41,925| Opt.           | 78    | 8.1   137 49.0     |
| Honda Pilot EX-L        | 73            | $40,655| Std./Opt.      | 80    | 7.5   136 49.5     |
| Nissan Pathfinder SL    | 67            | $40,470| Std./Opt.      | 72    | 7.7   137 47.0     |
| Chevrolet Traverse Premium (V6) | 64   | $49,945| Opt.           | 95    | 7.3   130 50.5     |
| Dodge Durango GT (V6)   | 63            | $43,525| Opt.           | 83    | 8.3   134 48.0     |
| Volkswagen Atlas SEL (V6) | 62         | $44,165| Std./Opt.      | 84    | 8.7   135 51.0     |
| Ford Explorer XLT (V6)  | 53            | $39,275| Opt.           | 71    | 7.9   135 49.5     |

### HOW WE TEST: Recommended models did well in our Overall Score, which factors in Road-Test Results, Predicted reliability, Owner satisfaction, and Safety, which includes crash-test results and the availability of front-crash prevention features, such as forward-collision warning and automatic emergency braking at city or highway speeds. For these systems, NA means no such system is offered; Opt. means it’s available on some versions but not necessarily on the one we tested; and models with standard systems are rated from 1 to 3 based on how many of these features are standard equipment. We also deduct points if a vehicle’s gear selector lacks fail-safes or is difficult to operate. Readers with a Digital or All-Access membership can go to CR.org/cars for complete, up-to-date ratings.
AUTOMOBILE RATINGS

<table>
<thead>
<tr>
<th>Model</th>
<th>Oct 18, 44</th>
<th>Mar 18, 47</th>
<th>Mar 18, 47</th>
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<tbody>
<tr>
<td>GMC Terrain</td>
<td>Feb 18, 40</td>
<td>Jan 18, 50</td>
<td>Jan 18, 50</td>
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<tr>
<td>Ford EcoSport</td>
<td>Oct 18, 50</td>
<td>Feb 18, 50</td>
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<tr>
<td>Hyundai Sonata</td>
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<td>Jan 18, 50</td>
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<tr>
<td>Hyundai Elantra GT</td>
<td>Feb 18, 50</td>
<td>Feb 18, 50</td>
<td>Feb 18, 50</td>
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<tr>
<td>Toyota C-HR</td>
<td>Dec 18, 50</td>
<td>Dec 18, 50</td>
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</tr>
<tr>
<td>Toyota Avalon Hybrid</td>
<td>Mar 18, 50</td>
<td>Mar 18, 50</td>
<td>Mar 18, 50</td>
</tr>
</tbody>
</table>

BUYING new vs. used

- car insurance
- financing
- trade-in value
- cost of ownership

STANDARDS

- safety standards
- emissions standards
- fuel efficiency standards

TECHNOLOGY

- smart home devices
- smart appliances
- cybersecurity

WELLNESS

- physical health
- mental health
- stress management

WATER

- water purification
- water conservation
- water來自
Thanks—but No Thanks
If this were a gift guide, we'd take the cash instead

**Seeing Double**
This jacket designer really doubled down on paisley.
Submitted by Keith Littlepage, West Chester, OH

**Festive First Aid**
Bow or no, this would make only the clumsiest person on your gift list happy.
Submitted by Constantin Barbulescu, Purchase, NY

**Empty Promises**
It may be the thought that counts, but generally there should be something in the box.
Submitted by Sally Ramsey, Nashville, TN

**Will They Still Work by Christmas Morning?**
We don't think these ad copy writers will last long, either.
Submitted by Kevin Hackett, Carlsbad, CA

Be on the lookout for goofs and glitches like these. Share them with us—by email at SellingIt@cro.consumer.org or by mail to Selling It, Consumer Reports, 101 Truman Ave., Yonkers, NY 10703—and we might publish yours.
Please include key information, such as the publication’s name and date.
Not all gifts are created equal

No matter what gift you’re giving this holiday season, rely on trusted reviews to bring home the best.

cr.org/wrapped
How to Use the Canada Extra Section

EVERY MONTH, Canada Extra provides Canadian pricing and availability information about products tested for that issue. The ratings in this section are based on this month’s reports, but they narrow your choices to the products that are sold in Canada.

You can use this section in either of two ways: Start with the main report, read about the products that interest you, and turn to this section to find whether they’re sold—and for what price—in Canada. Or start here, find products sold in Canada whose price and overall score appear promising, and read more about them in the main report and full ratings chart; page numbers appear with each Canadian report. (For some products, the Canadian model designation differs slightly from the one used in the U.S.)

In most cases, the prices we list here are the approximate retail in Canadian dollars; manufacturers’ list prices are indicated by an asterisk (*). The symbols shown at right identify CR Best Buys or recommended products in the U.S. ratings. “NA” in a chart means that information wasn’t available from the manufacturer. We include, in the Contact Info list on page 34d, the manufacturer’s web address in Canada so that you can go online to get information on a model you can’t find in the stores. (Many products that aren’t available in Canadian stores can be bought online.)

We appreciate your support, but we don’t take it for granted. Please write to CanadaExtra@cu.consumer.org and tell us what you think. We can’t reply to every email or implement every suggestion, but with your help we’ll try to keep growing to serve your needs.

CR Best Buy
Recommended models that offer the best combination of performance and price.

Recommended
Models that perform well and stand out for reasons we note.

Microwaves
Thirteen of the tested microwaves are available, including four of the recommended models. Report and ratings, pages 20-25

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Brand &amp; Model</th>
<th>Overall Score</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>OVER-THE-RANGE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Whirlpool YWMH75021HZ</td>
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<td>$650</td>
</tr>
<tr>
<td>2</td>
<td>KitchenAid YKMHS120ES</td>
<td>83</td>
<td>$700</td>
</tr>
<tr>
<td>5</td>
<td>Frigidaire Professional CPBM3077RF</td>
<td>81</td>
<td>$900</td>
</tr>
<tr>
<td>11</td>
<td>Whirlpool YWML55011HS</td>
<td>78</td>
<td>$500</td>
</tr>
<tr>
<td>14</td>
<td>Frigidaire CFMV1645ST</td>
<td>76</td>
<td>$450</td>
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<tr>
<td>15</td>
<td>Frigidaire Gallery CGMV176NTD</td>
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<tr>
<td>20</td>
<td>Ikea Lagon IMH160FW</td>
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<tr>
<td>21</td>
<td>KitchenAid YKMHC319ES</td>
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<td>$1,000</td>
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<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Brand &amp; Model</th>
<th>Overall Score</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARGE COUNTERTOP</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1</td>
<td>Panasonic NN-SE795S</td>
<td>88</td>
<td>$500</td>
</tr>
<tr>
<td>7</td>
<td>Panasonic NN-SD755S</td>
<td>77</td>
<td>$270</td>
</tr>
<tr>
<td>10</td>
<td>LG LCRT2010[ST]</td>
<td>76</td>
<td>$200</td>
</tr>
<tr>
<td>11</td>
<td>LG LMC1575</td>
<td>74</td>
<td>$200</td>
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<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Brand &amp; Model</th>
<th>Overall Score</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIDSIZED COUNTERTOP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Frigidaire CFCM1134L</td>
<td>71</td>
<td>$140</td>
</tr>
</tbody>
</table>

All-Access or Digital members can find the latest ratings at CR.org/microwaves1218.
## Laptops

Twenty-seven of the tested laptops are available. All are recommended models.

**Report and ratings, pages 46-52**

<table>
<thead>
<tr>
<th>Recommended Rank</th>
<th>Brand &amp; Model</th>
<th>Overall Score</th>
<th>Price</th>
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<tbody>
<tr>
<td><strong>12- TO 13-INCH</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1</td>
<td>Apple MacBook Pro 13-Inch (2018, MR9Q2LL/A)</td>
<td>83</td>
<td>$2,400</td>
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<tr>
<td>2</td>
<td>LG Gram 13 8th Gen.</td>
<td>80</td>
<td>$1,630</td>
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<tr>
<td>3</td>
<td>Apple MacBook Pro 13-Inch MPXR2LL/A</td>
<td>78</td>
<td>$1,690</td>
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<tr>
<td>4</td>
<td>LG Gram 13 Touchscreen</td>
<td>76</td>
<td>$2,500</td>
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<tr>
<td>5</td>
<td>Apple MacBook 12-Inch MNYH2LL/A</td>
<td>76</td>
<td>$1,730</td>
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<tr>
<td>7</td>
<td>Microsoft Surface Laptop (Core i5, 256GB)</td>
<td>73</td>
<td>$1,650</td>
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<tr>
<td>9</td>
<td>Asus ZenBook UX331UA-AS51</td>
<td>71</td>
<td>$1,850</td>
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<tr>
<td>10</td>
<td>Samsung Notebook 9 Pro</td>
<td>71</td>
<td>$1,480</td>
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<tr>
<td>13</td>
<td>Microsoft Surface Book 2</td>
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<td>$1,980</td>
</tr>
<tr>
<td>14</td>
<td>Microsoft Surface Laptop (Core i5, 128GB)</td>
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<td>$1,080</td>
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<td>15</td>
<td>Microsoft Surface Laptop (Core i7)</td>
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<td>17</td>
<td>Dell XPS 13 (i7 8th Gen.)</td>
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<td>$1,800</td>
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<tr>
<td>18</td>
<td>Microsoft Surface Pro (Core m3, 128GB)</td>
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<td>$980</td>
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<tr>
<td>20</td>
<td>Dell XPS 13 Convertible</td>
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<td>$1,800</td>
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<tr>
<td><strong>14-INCH</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>LG Gram 14 8th Gen.</td>
<td>78</td>
<td>$2,335</td>
</tr>
<tr>
<td>4</td>
<td>Asus ZenBook Flip UX461UA-DS51T</td>
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<td>$1,385</td>
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<tr>
<td>5</td>
<td>Asus ZenBook UX430UADH74</td>
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<td>$1,340</td>
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<tr>
<td>6</td>
<td>Acer Swift 5 SF514-52TP-52LH</td>
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<td>$1,570</td>
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<tr>
<td>7</td>
<td>Lenovo Flex 6-14IKB</td>
<td>67</td>
<td>$1,155</td>
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<tr>
<td><strong>15- TO 16-INCH</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Apple MacBook Pro 15-Inch with Touch Bar MPTU2LL/A</td>
<td>84</td>
<td>$2,300</td>
</tr>
<tr>
<td>2</td>
<td>Apple MacBook Pro 15-Inch (2018, MR932LL/A)</td>
<td>84</td>
<td>$3,180</td>
</tr>
<tr>
<td>3</td>
<td>Apple MacBook Pro 15-Inch MJLQ2LL/A</td>
<td>80</td>
<td>$2,350</td>
</tr>
<tr>
<td>4</td>
<td>Apple MacBook Pro 15-Inch MLHJ2LL/A</td>
<td>80</td>
<td>$2,250</td>
</tr>
<tr>
<td>10</td>
<td>Lenovo Yoga 720-15IKB</td>
<td>73</td>
<td>$1,900</td>
</tr>
<tr>
<td>11</td>
<td>Dell XPS 15 8th gen</td>
<td>72</td>
<td>$2,300</td>
</tr>
<tr>
<td>15</td>
<td>Asus VivoBook Pro NS500VD-DB74T</td>
<td>69</td>
<td>$1,745</td>
</tr>
<tr>
<td>22</td>
<td>Razer Blade 15</td>
<td>67</td>
<td>$2,850</td>
</tr>
</tbody>
</table>

All-Access or Digital members can find the latest ratings at [CR.org/laptops1218](http://CR.org/laptops1218).
**RECALLS**

### 2012-2015 FORD MODELS

Certain plug-in hybrid and electric vehicles were supplied with a 120V convenience charge cord that may be susceptible to overheating, resulting in increased cord temperatures, melting, and risk of fire.

**Affected:** 1,327 2012-2015 Focus and 2013-2015 Fusion and C-Max vehicles.

**What to do:** Dealers will replace the factory-supplied 120V convenience cord with the latest version of the cord that includes thermal protection.

### 2013-2016 FORD MODELS

On certain vehicles, the bushing that attaches the shift cable to the transmission may degrade over time, detach, and allow the transmission to be in a gear state different from the gear shift position selected by the driver. This condition could also allow the driver to move the shifter to Park and remove the ignition key while the transmission gear may not be in Park.

**Affected:** 36,887 2013-2014 Escape and 2013-2016 Fusion vehicles.

**What to do:** Dealers will replace the shifter cable bushing.

### 2015-2017 RAM MODELS

Certain trucks equipped with a power locking tailgate may experience unintended opening of the tailgate.

**Affected:** 260,315 1500, 2500, and 3500 vehicles.

**What to do:** Dealers will modify the locking mechanism.

### 2015-2018 FORD F-150

On certain vehicles, the activation of the front seat-belt pretensioners in a crash may result in momentary ignition of pretensioner exhaust gases and could lead to a fire.

**Affected:** 339,884 vehicles.

**What to do:** Dealers will inspect the B-pillar area, modify the floor covering and sound insulation, and apply heat-resistant tape.

### 2017-2018 NISSAN MODELS

On certain vehicles equipped with a mechanical key ignition system, a spring in the ignition switch could wear and break, and may allow the ignition key to move from the On position to the accessory position while driving. This would cause the engine to shut off and the airbag system to lose power.

**Affected:** 13,237 2017 NV1500, NV200, NV2500, NV3500, and Sentra, and 2017-2018 Frontier, Micra, and Versa Note vehicles.

**What to do:** Dealers will inspect the lot number of the ignition switch and replace it with a new one if it is affected. Note: Until the correction is performed, owners are advised to remove all objects from the ignition key ring, such as additional keys, keychains, etc.

### 2018 VOLKSWAGEN ATLAS

On certain vehicles, a drain tube for the air conditioner may be twisted and could drain water inside the passenger compartment onto the airbag control module, causing the airbag control module to malfunction.

**Affected:** 1,094 vehicles.

**What to do:** Dealers will inspect the HVAC drain tube and, if it’s found to be twisted, replace the hose and airbag control module.

### 2018-2019 CHRYSLER, DODGE, FIAT, JEEP, AND RAM MODELS

Certain vehicles may have been built with a defective powertrain controller, which could cause the engine to stall while driving.

**Affected:** 1,525 2018 Chrysler 300 and Town & Country; Dodge Challenger, Charger, Durango, Grand Caravan, and Journey; Fiat 500X; Jeep Compass, Grand Cherokee, Renegade, and Wrangler; and RAM 1500 and ProMaster; and 2019 Chrysler Pacifica and Jeep Cherokee vehicles.

**What to do:** Dealers will replace the powertrain controller.

### 2018-2019 DODGE AND JEEP MODELS

On certain vehicles, a problem with the brake system may cause gas bubbles to form in the brake fluid, causing a soft brake pedal feel and a reduction in brake performance.

**Affected:** 19,005 2018 Dodge Journey, 2018-2019 Dodge Grand Caravan and Jeep Compass, and 2019 Jeep Cherokee vehicles.

**What to do:** Dealers will bleed the rear brakes as necessary.

### 2018-2019 BUICK, CADILLAC, CHEVROLET, AND GMC MODELS

On certain vehicles, a problem with the rear brake system may cause gas bubbles to form in the brake fluid, causing a soft brake pedal feel and a reduction in brake performance.

**Affected:** 19,385 2018 Chevrolet Bolt EV and Volt, and 2018-2019 Buick Lacrosse; Cadillac XTS; Chevrolet Cruz, Equinox, Impala, and Malibu; and GMC Terrain vehicles.

**What to do:** Dealers will bleed the rear brakes.

### 2018-2019 MINI COOPER COUNTRYMAN

On certain vehicles, a crash protection plate was not installed beside the high-pressure fuel pump in the engine compartment.

**Affected:** 1,291 vehicles.

**What to do:** Dealers will install the missing crash protection plate.

DECEMBER 2018
### Autos

All of the tested vehicles are available in Canada. Report and ratings, pages 63-65

<table>
<thead>
<tr>
<th>Make &amp; Model</th>
<th>Price Range</th>
<th>Acceleration (sec.)</th>
<th>Fuel Economy (liters per 100 km)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0-50 km/h</td>
<td>0-100 km/h</td>
</tr>
<tr>
<td><strong>COMPACT HYBRID</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honda Insight</td>
<td>$27,990–$31,590</td>
<td>3.4</td>
<td>9.3</td>
</tr>
<tr>
<td><strong>COMPACT CARS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toyota Corolla Hatchback</td>
<td>$20,980–$27,980</td>
<td>3.5</td>
<td>9.2</td>
</tr>
<tr>
<td>Volkswagen Jetta</td>
<td>$20,995–$29,095</td>
<td>3.7</td>
<td>9.5</td>
</tr>
<tr>
<td><strong>MIDSIZED SUV</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subaru Ascent</td>
<td>$35,995–$49,995</td>
<td>3.5</td>
<td>8.5</td>
</tr>
</tbody>
</table>

**HONDA INSIGHT**
PRICE AS TESTED $24,995 (U.S.)
OVERALL SCORE 70

**TOYOTA COROLLA HATCHBACK**
PRICE AS TESTED $24,263 (U.S.)
OVERALL SCORE 72

**VOLKSWAGEN JETTA**
PRICE AS TESTED $23,325 (U.S.)
OVERALL SCORE 69

**SUBARU ASCENT**
PRICE AS TESTED $43,867 (U.S.)
OVERALL SCORE 88

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**Contact Info**

How to reach manufacturers in Canada.

- Acer [acer.ca](http://acer.ca)
- Apple [apple.ca](http://apple.ca)
- Asus [asus.ca](http://asus.ca)
- Dell [dell.com/en-ca](http://dell.com/en-ca)
- Frigidaire [frigidaire.ca](http://frigidaire.ca)
- Ikea [ikea.ca](http://ikea.ca)
- KitchenAid [kitchenaid.ca](http://kitchenaid.ca)
- Lenovo [lenovo.com](http://lenovo.com)
- LG [lg.ca](http://lg.ca)
- Microsoft [microsoft.ca](http://microsoft.ca)
- Panasonic [panasonic.ca](http://panasonic.ca)
- Razer [razer.com](http://razer.com)
- Samsung [samsung.ca](http://samsung.ca)
- Whirlpool [whirlpool.ca](http://whirlpool.ca)