

Total It Up

Estimate taxes and tips, then find the final cost.

GRADE 8 • 8.CE.1.b

8.CE.1.b "Estimate and solve contextual problems that require the computation of the sales tax, tip and resulting total."

NAME _____

DATE _____

FIND THE ADDED COST

To find a tax or tip, change the percent to a decimal and multiply it by the price. Add the tax or tip to the original price for the resulting total. For a quick estimate, round the price and use a nearby friendly percent.

WORKED EXAMPLE

A \$48 board game has 7.5% sales tax. Find the sales tax and resulting total.

1. Change 7.5% to 0.075.
2. Find the tax: $48 \times 0.075 = 3.60$.
3. Add the tax: $48 + 3.60 = 51.60$.

Answer: Sales tax: \$3.60. Resulting total: \$51.60.

PRACTICE 6 problems

- 1** A \$36 hoodie has 5% sales tax. Round the price to the nearest ten to estimate the tax. Then find the exact sales tax and resulting total.

ANSWER _____

- 2** Your cafe bill is \$28, and you leave a 15% tip. Round the bill to the nearest ten to estimate the tip. Then find the exact tip and resulting total.

ANSWER _____

- 3** A pair of headphones costs \$65 before 8% sales tax. Find the sales tax and resulting total.

ANSWER _____

- 4** A smoothie and snack cost \$22. You leave a 20% tip. Find the tip and resulting total.

ANSWER _____

- 5** A \$72 jacket has 6.25% sales tax. Find the sales tax and resulting total.

ANSWER _____

- 6** A restaurant meal costs \$45 before tip. You leave an 18% tip. Find the tip and resulting total.

ANSWER _____

APPLY IT Show your work

- 1** Maya buys an \$84 team jersey and a \$16 water bottle at a pop-up shop. The shop charges 5% sales tax on the whole purchase. Estimate the total, then find the exact sales tax and resulting total.

WORK SPACE

ANSWER _____

- 2** After robotics club, Jordan's meal costs \$40 before tax and tip. The sales tax is 7%, and Jordan leaves a 15% tip based on the meal cost before tax. Estimate the final amount by using 10% for the tax, then find the exact tax, tip, and resulting total.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A restaurant bill is \$50 before tax and tip. A coupon takes 20% off the bill first. Then 8% sales tax and an 18% tip are both calculated from the discounted pre-tax bill. Find the discount, sales tax, tip, and resulting total.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A \$36 hoodie has 5% sales tax. Round the price to the nearest ten to estimate the tax. Then find the exact sales tax and resulting total.	Estimated tax: about \$2. Exact sales tax: \$1.80. Resulting total: \$37.80.
2	Your cafe bill is \$28, and you leave a 15% tip. Round the bill to the nearest ten to estimate the tip. Then find the exact tip and resulting total.	Estimated tip: about \$4.50. Exact tip: \$4.20. Resulting total: \$32.20.
3	A pair of headphones costs \$65 before 8% sales tax. Find the sales tax and resulting total.	Sales tax: \$5.20. Resulting total: \$70.20.
4	A smoothie and snack cost \$22. You leave a 20% tip. Find the tip and resulting total.	Tip: \$4.40. Resulting total: \$26.40.
5	A \$72 jacket has 6.25% sales tax. Find the sales tax and resulting total.	Sales tax: \$4.50. Resulting total: \$76.50.
6	A restaurant meal costs \$45 before tip. You leave an 18% tip. Find the tip and resulting total.	Tip: \$8.10. Resulting total: \$53.10.

PART 2 • APPLY IT

- Estimated total: about \$105. Exact sales tax: \$5.00. Resulting total: \$105.00.** Add the item prices to get \$100. Find 5% of \$100, then add the tax to the subtotal.
- Estimated total: about \$50. Exact sales tax: \$2.80. Exact tip: \$6.00. Resulting total: \$48.80.** For the estimate, use \$4 for tax and \$6 for tip. For the exact total, find 7% and 15% of \$40, then add both amounts to \$40.

CHALLENGE

Discount: \$10.00. Discounted pre-tax bill: \$40.00. Sales tax: \$3.20. Tip: \$7.20. Resulting total: \$50.40.

Accept equivalent money notation, such as 5 dollars instead of \$5.00. For estimates, accept answers based on the stated rounding or percent instruction.