LESSON MAKER PRO

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 x 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

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.

WORK SPACE AND ANSWER

ANSWER KEY

Total It Up

GRADE 8 · 8.CE.1.b

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

1. **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.
2. **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.