

Unit 4: Proportional Relationships and Percentages

ADVANCED • SET 2

Name: _____ Date: _____

Solve each problem. Show your work on scratch paper and write your final answer. Round money to the nearest cent and percents to the nearest tenth unless the answer is exact.

1. A jacket originally costs \$85. The price is first increased by 40%, then that new price is decreased by 25%. What is the final price in dollars?

Answer: _____

3. A restaurant meal costs \$240 before tax and tip. A sales tax of 8.5% is applied, and a tip of 18% is calculated on the pre-tax amount. What is the total amount paid in dollars?

Answer: _____

5. A town's population is 12,500. It decreases by 12% one year, then increases by 5% the next year. What is the population after the two years?

Answer: _____

7. An item costs \$92 before tax. With 8% sales tax added, what is the total cost in dollars, rounded to the nearest cent?

Answer: _____

9. A price is marked down from \$150 to \$96. What is the percent discount?

Answer: _____

2. After a 15% discount, Maya paid \$68 for a pair of shoes. What was the original price in dollars?

Answer: _____

4. Find the simple interest earned on a principal of \$1,500 invested at an annual rate of 6.5% for 3 years. Give the interest in dollars.

Answer: _____

6. A number increases from 36 to 45. What is the percent increase?

Answer: _____

8. An employee earns \$48,000 per year. She receives a 7.5% raise, and the following year receives another 3% raise on her new salary. What is her final annual salary in dollars?

Answer: _____

10. Simple interest of \$270 was earned on a principal of \$1,800 over 2 years. What was the annual interest rate, as a percent?

Answer: _____

11. A quantity of 320 is first increased by 25%. By what percent must the new amount then be decreased to return exactly to 320?

Answer: _____

12. A dinner bill of \$90 already includes a 20% tip. What was the cost of the food before the tip, in dollars?

Answer: _____