

Name _____
CC Algebra: 8A

Date _____
Period _____

Percent and Money Word Problems

1. What would be the total cost of a new Gaming System that cost \$399 with an 8.5% tax?

2. Janie can spend at most \$75.00 for an outfit including 8% sales tax. Find some outfit prices that will keep her within her budget. Use the table to organize your information.

a)

Price before tax	Tax	Total	Within Budget?
\$70	$70(.08) = \$5.60$	$\$70 + \$5.60 = \$75.60$	No

b) What is the highest price the outfit could be? Write and simplify an inequality to represent the above situation. Then solve.

3. Write a simplified expression to represent the following:

a) The total cost of a flat screen television including a 6% tax.

b) The cost of a shirt after a 25% discount.

4. Todd received a 12% discount on a movie pass. He paid \$33.44. Write an equation to find the price before the discount.
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5. Sam tips 18% at a restaurant. She paid \$25.96 for the bill, including the tip. Find the price of the meal before the tip.
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6. Janelle tips 20% for service at restaurants. When she left a restaurant, she saw the total she paid for her meal was \$14.82. How much was the meal without the tip?
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7. Ellie received a 15% discount for renewing a magazine subscription. She paid \$26.35. Write an equation to find the price before the discount.
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8. Kristin can afford to spend at most \$50 for a birthday dinner at a restaurant, including a 15% tip. What is the most amount of money that Kristin can spend before the tip?

9. Mark buys 5 movie tickets online for \$60. The online fee for each ticket is \$1.50. What is the price of each ticket? Write an equation and solve.

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10. Leon paid \$26.50 for a shirt with a sales tax of 6% included but he doesn't remember the price without tax. Write an equation and solve to find the price of the shirt before tax.

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11. To rent a power washer, a shop charges a deposit, plus an hourly rate. Bob can determine how much he will pay for a rental lasting "t" hours by using the expression $10t + 25$. What does the coefficient "10" represent?

- A) the length of time of the rental
B) the insurance for the power washer
C) the hourly rate for renting the power washer
D) the deposit for the power washer

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12. The math club had 400 posters to sell as a fundraiser. It costs \$3.00 per poster to have them printed. The club sells the posters for \$10 each. If a formula was written to find the club's profit where $P(n)$ is the club's profit when "n" posters were sold, it would look like this:

$$P(n) = 10n - 1200$$

What would $10n$ represent? _____

What would \$1200 represent? _____

How can you use the formula to find the profit from the sale of 200 posters?

13. On Day 1, Jack rode his bicycle 80 miles in 8 hours.
The formula to find distance is $rate \times time = distance$.
- a) Find Jack's *rate*. Solve for "r."
- b) If Jack continues riding at his average rate for the 2nd day at a time of "t," write an equation to represent his total distance for the two days.
- c) How many miles did he drive after traveling 9 hours the second day?
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14. To get the "combo-deal" Jolie must spend more than \$18. She is planning on ordering grilled chicken for \$10 and some packages of carrots that cost \$1.75 each. Write an inequality to represent the above situation.

Which number of packages of carrots will NOT allow Jolie to purchase the combo-deal?
(Must show algebraic work)

- A) 4
B) 5
C) 6
D) 7