

Creating Equations from a Context

Name: _____

1. Juan's cell phone company charges \$35 a month for phone service plus \$0.50 for each text message. How many text messages does Juan send in a month if his bill was \$52?

Variable: _____

Equation: _____

Solution: _____

2. Friendship's soccer team purchased uniforms and equipment for a total cost of \$912. The equipment cost \$612, and the uniforms cost \$25 each. How many uniforms did the school purchase?

Variable: _____

Equation: _____

Solution: _____

3. Long's Coffee Shop sells a refill mug for \$8.95. Each refill costs \$1.50. Last month, Jalissa spent \$26.95 on a mug and refills. How many refills did she buy?

Variable: _____

Equation: _____

Solution: _____

4. The bill for the repair of a computer was \$179. The cost for parts was \$44, and the labor charge was \$45 per hour. How many hours did it take to repair the computer?

Variable: _____

Equation: _____

Solution: _____

5. The Elk Grove Bowling Alley offers a special. Each game costs \$2.50, and shoe rental \$2. You spend \$14.50 total. How many games did you bowl?

Variable: _____

Equation: _____

Solution: _____

6. Sandra scores 4 baskets in his first basketball game. She then scored the same number of baskets in each of her next 3 games. If Sandra made 19 baskets total, how many baskets did she score in each of the three games?

Variable: _____

Equation: _____

Solution: _____

7. You and three friends go to the town carnival. You have a coupon for \$20 off that will save your group money! If the total bill to get into the carnival was \$100, how much does one regular price ticket cost?

Variable: _____

Equation: _____

Solution: _____

8. A new one-year membership at RecPlex costs \$160. A registration fee of \$28 is paid up front, and the rest is paid monthly. How much do new members pay each month?

Variable: _____

Equation: _____

Solution: _____

9. It costs Raquel \$5 in tolls to drive to work and back each day, plus she uses 3 gallons of gas. It costs her a total of \$15.50 to drive to work and back each day. How much per gallon is Raquel paying for her gas?

Variable: _____

Equation: _____

Solution: _____

10. Solve the following equations:

a. $8(7x - 1) = 6(-4 + 8x)$

b. $5 + 3(1 + 7x) = 4(6 + 5x) - 3x$

c. $3(3x + 1) - 5(3x - 1) = -7x - x$