## Day 2 – Creating and Solving Equations Practice

#### Write an equation that models the situation. You do NOT have to solve!

1. Five times the sum of e and 3 is equal to -5.

2. Jamie buys 9 CDs at same price per CD and a cassette tape for \$9.45. His total bill was \$118.89.

# Define a variable for each problem below. Then write an equation that can be used to model the following problem. Finally, use your equation to <u>SOLVE</u> the problem.

3. At a concert, Nabila purchased three t-shirts and a concert program that cost \$15. In total, Nabila spent \$90. Find the cost of a single t-shirt if they all had the same price.

Variables: \_\_\_\_\_

Model:\_\_\_\_\_

4. Oberon Cell Phone Company advertises service for 3 cents per minute plus a monthly fee of \$29.95. If Parker's phone bill for October was \$38.95, find the number of minutes he used.

Variables:

Model: \_\_\_\_\_

5. Jacqueline had \$20 to spend on 7 raffle tickets. After purchasing them she had \$6 left. How much did each raffle ticket cost?

Variables:
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Model:\_\_\_\_\_

### Foundations of Algebra

### Module 4: Equations & Inequalities

6. An online retailer charges \$6.99 plus \$0.55 per pound to ship electronic purchases. How many pounds is a DVD player for which the shipping charge is \$11.94?

Model: \_\_\_\_\_

7. Savannah bought a laptop for \$500. It was marked \$50 off because it was out of the box and slightly scratched. She also got a 25% student discount, which was taken off the original price. What was the original price of the laptop?

Variables:

Model: \_\_\_\_\_

8. The zoo offers special admission rates for large groups of visitors. The zoo charges \$7.50 admission for the first visitor and \$5.50 for each additional visitor in the group. Write an equation for the total cost of admission in terms of the number of visitors. How much is admission for a group of 8 visitors?

Variables: \_\_\_\_\_

Model: \_\_\_\_\_

9. The jewelry store has a special on shirts. If you purchase 2 shirts for \$65, each additional shirt is \$24.99. Write an equation that represents that total cost of shirts based on the number of shirts purchased. What is the total cost of purchasing 4 shirts?

Variables: \_\_\_\_\_

Model: \_\_\_\_\_

10. The width of a rectangle is 5 feet less than the length. The perimeter is 62. Find the length and width of the rectangle.

Variables: \_\_\_\_\_

Model:\_\_\_\_\_