

Name \_\_\_\_\_

## SYSTEM OF EQUATIONS-WORD PROBLEMS #2

**Directions:** Find the answers to each situation below by setting up and solving a *system of equations*.

- 1) William bought some tickets to see his favorite singer. He bought some *adult* tickets and some *children's* tickets, for a total of 15 tickets. The adult tickets cost \$30 per ticket, and the children's tickets cost \$20 per ticket. If he spent a total of \$270, then how many adult and children's tickets did he buy?

$$a + c = 15$$
$$30a + 20c = 270$$

**a** = \_\_\_\_\_

**b** = \_\_\_\_\_

- 2) Ava's school took a field trip. A total of 32 vehicles were needed for the trip. Some students took the *bus*, and some students *car-pooled*. There were 27 people on each bus and 3 people in each car. 408 people altogether attended the trip. How many buses and cars were needed for the trip?

**b** = \_\_\_\_\_

**c** = \_\_\_\_\_

- 3) Liam's football team scored a total of 43 separate times this season, with a mix of *touchdowns* and *field goals*. Each touchdown is worth 7 points, and each field goal is worth 3 points. If the team scored a total of 301 points this season, how many touchdowns and field goals did they score?

**t** = \_\_\_\_\_

**f** = \_\_\_\_\_

- 4) Emily went to the movie theater for her birthday. A mix of adults and children attended, making a total of 22 people. Each adult ticket was \$9 and each child's ticket was \$5.50. If the total cost for the party was \$125.50, then how many adults and how many children attended?

**a** = \_\_\_\_\_

**c** = \_\_\_\_\_

- 5) Michael's class held a food drive for the holidays. There are a total of 29 students in his class. On average, each *boy* and each *girl* brought in 3 cans of food apiece. If the class brought in a total of 87 cans of food, how many boys and how many girls are in the class?

**b** = \_\_\_\_\_

**g** = \_\_\_\_\_

- 6) Ava's family drove to Disney Land for spring break. Her *mom* and *dad* shared the driving duties for a total of 24 hours. Her mom drove 75 miles per hour, and her dad drove 60 miles per hour. If they drove a total of 1,710 miles, how many hours did each person drive for?

**m** = \_\_\_\_\_

**d** = \_\_\_\_\_