

Name _____

SYSTEM OF EQUATIONS-WORD PROBLEMS #1

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

- 1) Jacob bought some tickets to see his favorite singer. He bought some *adult* tickets and some *children's* tickets, for a total of 9 tickets. The adult tickets cost \$10 per ticket, and the children's tickets cost \$8 per ticket. If he spent a total of \$76, then how many adult and children's tickets did he buy?

$$a + c = 9$$
$$10a + 8c = 76$$

a = _____

b = _____

- 2) Sophia's school took a field trip. A total of 21 vehicles were needed for the trip. Some students took the *bus*, and some students *car*-pooled. There were 30 people on each bus and 4 people in each car. 318 people altogether attended the trip. How many buses and cars were needed for the trip?

b = _____

c = _____

- 3) Ethan's football team scored a total of 35 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 193 points this season, how many touchdowns and field goals did they score?

t = _____

f = _____

- 4) Emma went to the movie theater for her birthday. A mix of adults and children attended, making a total of 19 people. Each adult ticket was \$9 and each child's ticket was \$5.50. If the total cost for the party was \$150, then how many adults and how many children attended?

a = _____

c = _____

- 5) Noah's class held a food drive for the holidays. There are a total of 25 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 75 cans of food, how many boys and how many girls are in the class?

b = _____

g = _____

- 6) Olivia's family drove to Disney Land for spring break. Her *mom* and *dad* shared the driving duties for a total of 14 hours. Her mom drove 65 miles per hour, and her dad drove 60 miles per hour. If they drove a total of 895 miles, how many hours did each person drive for?

m = _____

d = _____