

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) Ben bought a total of 11 pizzas for his class party. The amount of *large* pizzas was one less than twice the amount of *medium* pizzas. How many large and how many medium pizzas did he buy?

$$\begin{cases} m + L = 11 \\ L = 2m - 1 \end{cases}$$

m = _____

L = _____

- 2) *Ashley* and her *brother* combined to read a total of 33 books over the summer. *Sophia* read three more than four times as many books as her brother. How many books did each person read?

s = _____

b = _____

- 3) Angle *X* and Angle *Y* are supplementary angles. Angle *X* is sixteen degrees more than three times the size Angle *Y*. What are the measures of Angle *X* and Angle *Y*?

x = _____

y = _____

- 4) The sum of *Alyssa's* age and her *sister's* age is 48 years. Emma age is 6 years less than twice here sister's age. What is Emma's age, and what is her sister's age?

e = _____

s = _____

- 5) Ryan has a mix of *action* and *sports* games for a total of 39 video games. His action collection is three more than half his sports collection. How many action games and how many sports games does he have?

a = _____

s = _____

- 6) The perimeter of a rectangle is 162 cm. The *length* of the rectangle is eleven centimeters more than four times the size of the *width*. What is the length and width of the rectangle?

L = _____

W = _____