

Name _____

SYSTEM OF EQUATIONS-WORD PROBLEMS #6—KEY

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

- 1) The sum of a number, x , and another number, y , is 62.5. The difference of x and y is 20.5. Find x and y .
 $x + y = 62.5$
 $x - y = 20.5$
 $x = 41$
 $y = 21.5$
- 2) The sum of a number, x , and another number, y , is 101. The difference of x and y is 163. Find x and y .
 $x = 132$
 $y = -31$
- 3) The sum of a twice a number, x , and another number, y , is 1. The difference of x and y is -0.25. Find x and y .
 $x = 0.25$
 $y = 0.5$
- 4) The sum of five times a number, x , and another number, y , is 0. The difference of x and y is 72. Find x and y .
 $x = 12$
 $y = -60$
- 5) The sum of half of a number, x , and another number, y , is -28. The difference of x and y is 4. Find x and y .
 $x = -16$
 $y = -20$
- 6) The sum of a three times a number, x , and half of another number, y , is 96. The difference of x and y is 60. Find x and y .
 $x = 36$
 $y = -24$
- 7) The sum of twice a number, x , and twice another number, y , is 118. The value of y is one less than twice the value of x . Find x and y .
 $x = 20$
 $y = 39$
- 8) The sum of a number, x , and the opposite of another number, y , is 66. The difference of x and y is also 66. Find x and y .

INFINITE SOLUTIONS