

**Algebra 1**  
**5.2 Worksheet #1**

Name \_\_\_\_\_

**Use the substitution method to solve the linear system.**

1.  $y = 6x$   
 $x + y = 28$

2.  $y = 2x$   
 $5x - y = 30$

3.  $x = y + 2$   
 $2y + x = 17$

4.  $c = 3d - 4$   
 $c + d = 16$

5.  $y = 3x + 1$   
 $2x + 3y = 25$

6.  $3a - 2b = -6$   
 $a = b - 1$

7.  $3a + 5b = 7$   
 $b - 4a = 6$

8.  $x + y = 15$   
 $4x + 3y = 38$

9. Sam has 30 nickels and dimes worth \$2.40. How many nickels does he have?

10. A pet store sold 23 puppies and kittens. They sold 9 more puppies than kittens. How many of each did the store sell?