

Name: \_\_\_\_\_ Period: \_\_\_\_\_

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## **HW 8-4: Solve Systems by Substitution**

Solve each system of equations by substitution.

Examples:

A)  $y = x + 4$   
 $y = 2$

B)  $y = x - 6$   
 $y = 3x$

C)  $y = 2x + 1$   
 $3x + 4y = 26$

D)  $2x + 5y = 44$   
 $y = 6x - 4$

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**Solve each system of equations by substitution.**

1.  $y = x + 7$   
 $y = 4$

2.  $y = x + 32$   
 $y = 5x$

3.  $y = -x - 9$   
 $y = -4x$

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

5.  $y = x + 5$   
 $y = 6$

6.  $y = x + 12$   
 $y = -18$

7.  $y = x - 10$   
 $y = -12$

8.  $y = x + 15$   
 $y = 2x$

9.  $y = 2x - 3$   
 $x + y = 18$

10.  $y = \frac{1}{4}x$   
 $x + 4y = 8$

11.  $y = x + 12$   
 $4x + 2y = 27$

12.  $10x + 3y = 19$   
 $y = 2x + 5$

13.  $y = 4x + 45$   
 $x = 4y$

14.  $y = -2x$   
 $x = 0$

15.  $x + y = -3$   
 $y = x + 3$

16.  $y = x + 4$   
 $y = 0$

17.  $x - y = 6$   
 $y = -1$

18.  $y = -2$   
 $4x - 3y = 18$

19.  $6x - 4y = -36$   
 $y = -3x$

20.  $2x - 3y = -1$   
 $x = y - 1$

21.  $-3x + 3y = 4$   
 $x = y - 3$

22.  $x = -5$   
 $3x - 4y = 17$

23.  $5x - 4y = -36$   
 $x = y$

24.  $4x + 3y = -5$   
 $x = y - 3$