

## 3.2a Solving Systems by Substitution

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Name \_\_\_\_\_

Date \_\_\_\_\_ Hour \_\_\_\_\_

**Solve each system by substitution.**

1)  $y = 2x + 6$   
 $y = 3x + 9$

2)  $y = -4x - 12$   
 $y = -3x - 8$

3)  $-4x - 2y = -6$   
 $y = -2x + 3$

4)  $x = 2y + 5$   
 $-3x + 2y = 8$

5)  $2x + 5y = -23$   
 $x - 2y = 2$

6)  $-4x + y = 6$   
 $-3x + 3y = -9$

7)  $x + 5y = 23$   
 $-5x - 4y = 11$

8)  $24x + 3y = 6$   
 $8x + y = -7$

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Name \_\_\_\_\_

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Solve each system by substitution.

1)  $y = 2x + 6$   
 $y = 3x + 9$

$(-3, 0)$

2)  $y = -4x - 12$   
 $y = -3x - 8$

$(-4, 4)$

3)  $-4x - 2y = -6$   
 $y = -2x + 3$

Infinite number of solutions

4)  $x = 2y + 5$   
 $-3x + 2y = 8$

$(-7, -6)$

5)  $2x + 5y = -23$   
 $x - 2y = 2$

$(-4, -3)$

6)  $-4x + y = 6$   
 $-3x + 3y = -9$

$(-3, -6)$

7)  $x + 5y = 23$   
 $-5x - 4y = 11$

$(-7, 6)$

8)  $24x + 3y = 6$   
 $8x + y = -7$

No solution