

Name : .....

Score : ..... Date : .....

**Solving Systems of Equations**

Solve each system by substitution. Show your work

1  $y = 5x + 184$   
 $y = -6x - 15$

2  $4x + 2y = 10$   
 $x - y = 13$

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

4  $-2x - y = 9$   
 $5x - 2y = 18$

5  $8x + 14y = 4$   
 $-6x - 7y = -10$

6  $-9x + 5y = -4x$   
 $-11 = -20 + 9y$

7  $3x + 7y = 2$   
 $10x + 5y = -30$

8  $-7x + y = -10$   
 $-9x - y = -22$

Space for Rough work

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## Solving Systems of Equations

### Answers

1  $y = 5x + 184$   
 $y = -6x - 15$

$x = -\frac{199}{11}, y = \frac{1029}{11}$

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

$x = 1, y = 2$

5  $8x + 14y = 4$   
 $-6x - 7y = -10$

$x = 4, y = -2$

7  $3x + 7y = 2$   
 $10x + 5y = -30$

$x = -4, y = 2$

2  $4x + 2y = 10$   
 $x - y = 13$

$x = 6, y = -7$

4  $-2x - y = 9$   
 $5x - 2y = 18$

$x = 0, y = -9$

6  $-9x + 5y = -4x$   
 $-11 = -20 + 9y$

$x = 1, y = 1$

8  $-7x + y = -10$   
 $-9x - y = -22$

$x = 2, y = 4$

Space for  
Rough work