

Key

Linear Equations and Inequalities



Systems of Equations: Substitution Method

$x - 5y = 10$	$x - 5(2x + 7) = 10$
$-2x + y = 7 \Rightarrow y = 2x + 7$	$x - 10x - 35 = 10$
Solution $(-5, -3)$	$-9x - 35 = 10$
	$-9x = 45$
	$x = -5$

1. $y = 5 - 4x$
 $3x - 2y = 12$
 (2, -3)

8. $y = -x + 6$
 $x - 2y = -6$
 (2, 4)

2. $3x + 2y = 8$
 $x = 3y + 10$
 (4, -2)

9. $2y - x = 6$
 $3y - x = 4$
 (-10, -2)

3. $3x - 4y = -15$
 $5x + y = -2$
 (-1, 3)

10. $5x - 6y = 16$
 $5x + y = 2$
 (4/5, -2)

4. $x + y = 2$
 $3x + 2y = 5$
 (1, 1)

11. $y = 3x$
 $x + y = 8$
 (2, 6)

5. $x = 3 - 3y$
 $4y = x + 11$
 (-3, 2)

12. $x - 3y = -5$
 $2x + y = 11$
 (4, 3)

6. $x - y = -15$
 $x + y = -5$
 (-10, 5)

13. $-x + y = 5$
 $y = -3x + 1$
 (-1, 4)

7. $2x + y = -6$
 $3x + y = -10$
 (-4, 2)

14. $2x = 3y$
 $x = 3y - 3$
 (3, 2)