

X- and Y-Intercepts**Solving Systems of Linear Equations by Substitution**

$$\begin{aligned}4x + 4y &= 12 \\3x + y &= 9 \longrightarrow y = 9 - 3x \\4x + 4(9 - 3x) &= 12 \\4x + 36 - 12x &= 12 \\36 - 8x &= 12 \\-8x &= -24 \\x &= 3 \\ \text{Solution } (3, 0)\end{aligned}$$

Solve.

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

2. $x + y = 5$
 $x = y + 7$

3. $x - y = 1$
 $2x + y = 8$

4. $3x - y = 9$
 $y = x + 5$

5. $3x + 4y = 26$
 $-2x + y = 1$

6. $y = 2x + 3$
 $y = 4x + 4$

7. $2x + 7y = 8$
 $x + 5y = 7$

8. $y = 4x + 4$
 $y = 2x + 8$

9. $x + 3y = 17$
 $2x + 3y = 22$

10. $4x - 7y = 9$
 $y = x - 3$

11. $8x - 5y = 9$
 $y = 2x - 4$

12. $2x + 4y = -2$
 $3x + y = 7$

13. $3x + y = 5$
 $2x + 3y = 8$

14. $2x + 6y = 24$
 $x - 4y = -2$