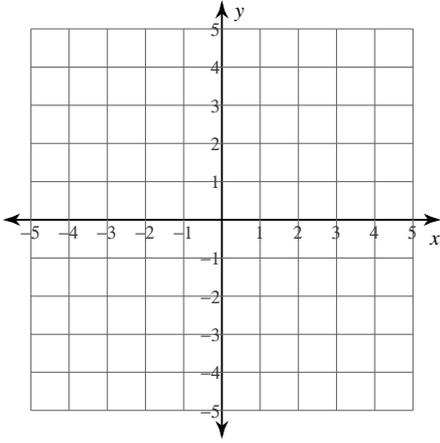


**Solving by Substitution**

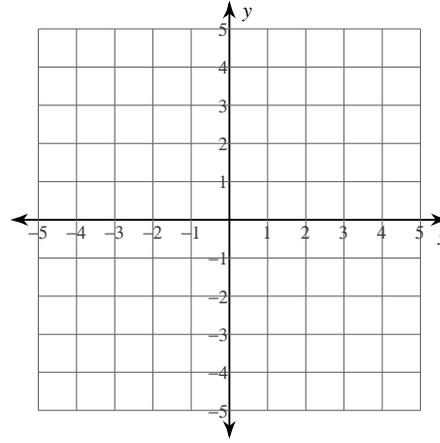
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**Solve each system by graphing.**

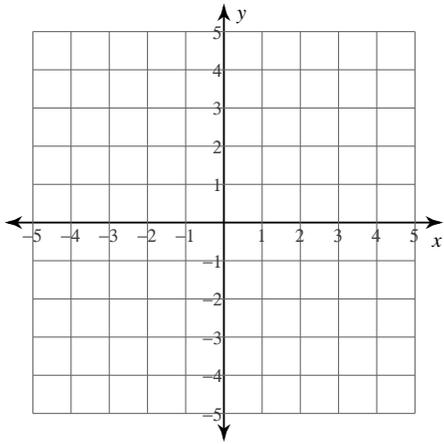
$$1) \begin{aligned} -16 &= 7x + 4y \\ x &= 2 - 2y \end{aligned}$$



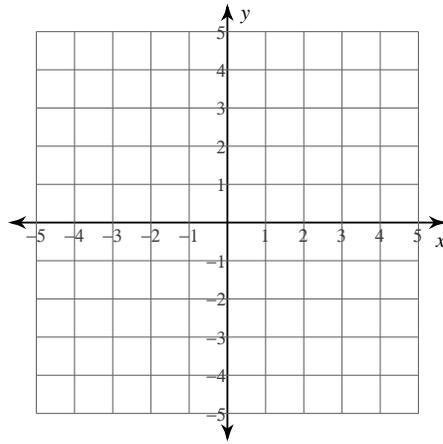
$$2) \begin{aligned} -x - 3y &= -3 \\ 0 &= 6x + 12 + 3y \end{aligned}$$



$$\begin{aligned} 3) \quad & -y + 6x + 2 = 0 \\ & 3 + y = x \end{aligned}$$



$$\begin{aligned} 4) \quad & y + 2 = 4x \\ & -3 = -y - x \end{aligned}$$



**Solve each system by substitution.**

$$\begin{aligned} 5) \quad & y = 6x + 17 \\ & y = -2x - 7 \end{aligned}$$

$$\begin{aligned} 6) \quad & y = -6x - 2 \\ & y = -8x \end{aligned}$$

$$\begin{aligned} 7) \quad y &= 4x + 17 \\ y &= -2x - 7 \end{aligned}$$

$$\begin{aligned} 8) \quad y &= -3x + 15 \\ y &= -2x + 8 \end{aligned}$$

$$\begin{aligned} 9) \quad y &= -3x + 16 \\ y &= 3x - 20 \end{aligned}$$

$$\begin{aligned} 10) \quad 3x + 7y &= 16 \\ y &= -5x + 16 \end{aligned}$$

$$\begin{aligned} 11) \quad -7x - 8y &= 8 \\ y &= -4x + 24 \end{aligned}$$

$$\begin{aligned} 12) \quad y &= 4x + 8 \\ -8x + 6y &= 16 \end{aligned}$$

$$\begin{aligned} 13) \quad & -x - 3y = 5 \\ & y = 2x + 10 \end{aligned}$$

$$\begin{aligned} 14) \quad & y = -2x - 8 \\ & -x - y = 5 \end{aligned}$$

$$\begin{aligned} 15) \quad & -4x + 2y = 14 \\ & x + y = 1 \end{aligned}$$

$$\begin{aligned} 16) \quad & x + 6y = 14 \\ & -8x - y = -18 \end{aligned}$$

$$\begin{aligned} 17) \quad & -7x + y = -11 \\ & 7x - 7y = -7 \end{aligned}$$

$$\begin{aligned} 18) \quad & x + y = 8 \\ & -3x + 4y = -10 \end{aligned}$$

$$\begin{aligned} 19) \quad & 6x - 8y = -10 \\ & x + y = 10 \end{aligned}$$

$$\begin{aligned} 20) \quad & 8x - 6y = -14 \\ & 6x - 2y = 2 \end{aligned}$$

$$\begin{aligned} 21) \quad & 5x - 2y = 14 \\ & 3x - 7y = 20 \end{aligned}$$

$$\begin{aligned} 22) \quad & 6x - 2y = 16 \\ & -6x - 8y = 4 \end{aligned}$$

$$\begin{aligned} 23) \quad & 2x - 2y = 8 \\ & -7x - 5y = 20 \end{aligned}$$

$$\begin{aligned} 24) \quad & 3x + 6y = 21 \\ & y = 6 \end{aligned}$$

## Answers to Solving by Substitution (ID: 1)

1)  $(-4, 3)$

5)  $(-3, -1)$

9)  $(6, -2)$

13)  $(-5, 0)$

17)  $(2, 3)$

21)  $(2, -2)$

2)  $(-3, 2)$

6)  $(1, -8)$

10)  $(3, 1)$

14)  $(-3, -2)$

18)  $(6, 2)$

22)  $(2, -2)$

3)  $(-1, -4)$

7)  $(-4, 1)$

11)  $(8, -8)$

15)  $(-2, 3)$

19)  $(5, 5)$

23)  $(0, -4)$

4)  $(1, 2)$

8)  $(7, -6)$

12)  $(-2, 0)$

16)  $(2, 2)$

20)  $(2, 5)$

24)  $(-5, 6)$