

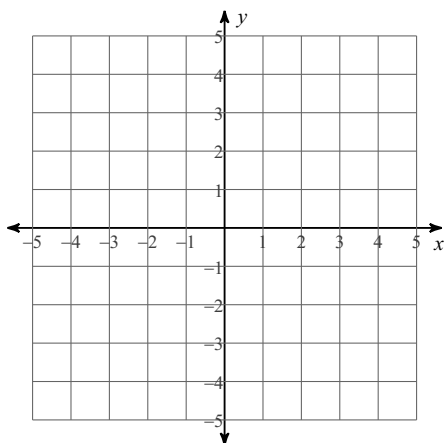
## Systems of Equations &amp; Inequalities by Graphing

Date \_\_\_\_\_ Period \_\_\_\_\_

**Solve each system by graphing.**

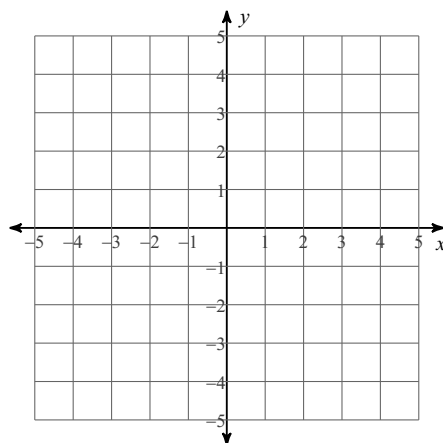
1)  $y = \frac{1}{2}x - 3$

$y = \frac{5}{2}x + 1$



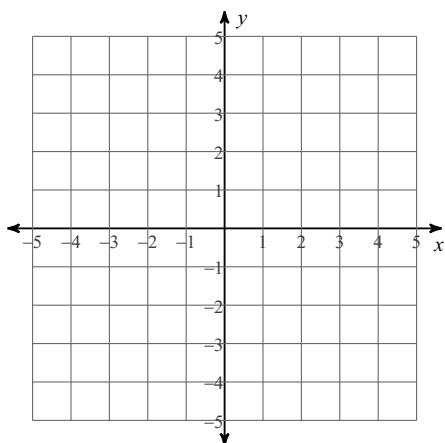
2)  $y = \frac{7}{2}x - 4$

$y = -\frac{1}{2}x + 4$



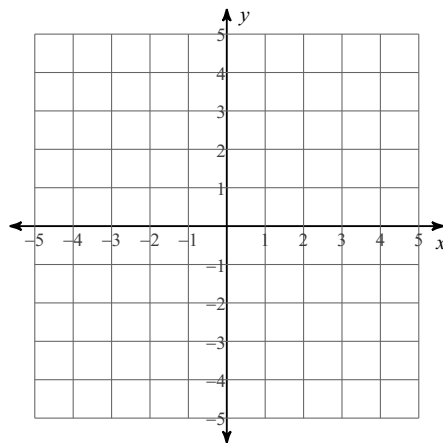
3)  $y = \frac{3}{2}x - 4$

$x = 2$



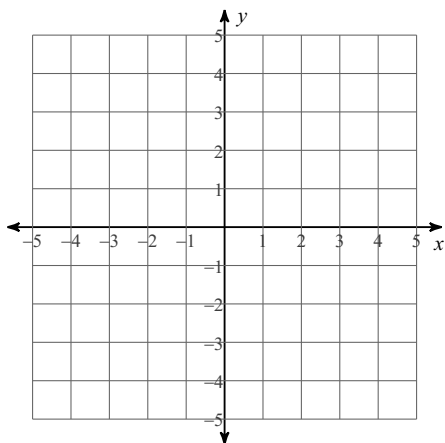
4)  $y = -x + 2$

$y = x + 4$



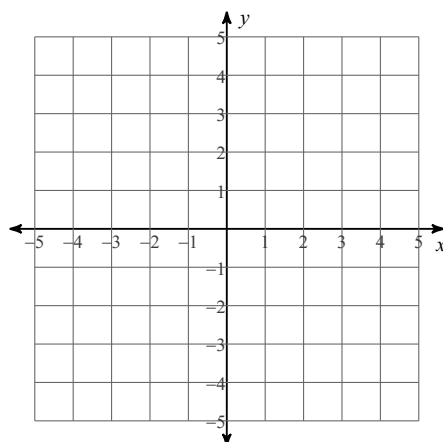
$$5) y = \frac{7}{3}x - 4$$

$$y = \frac{1}{3}x + 2$$



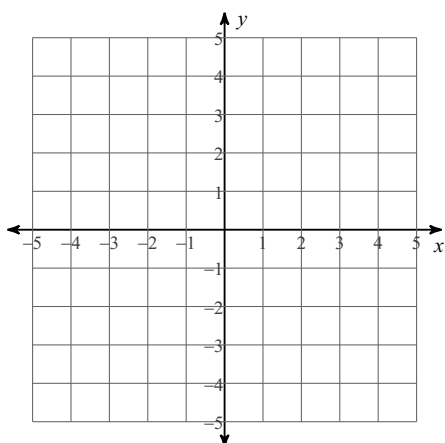
$$6) y = \frac{2}{3}x - 1$$

$$2x - 3y = 3$$



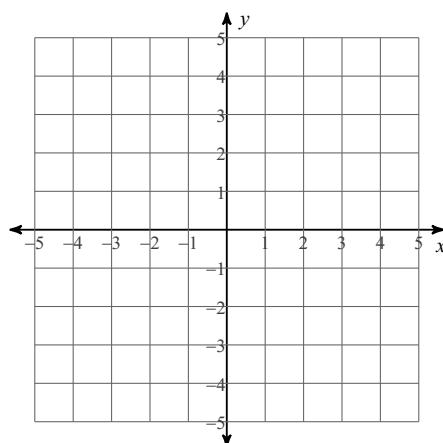
$$7) 2x - y = -2$$

$$y = 4$$

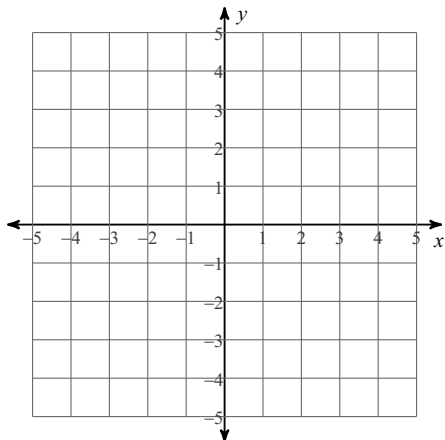


$$8) x - y = -4$$

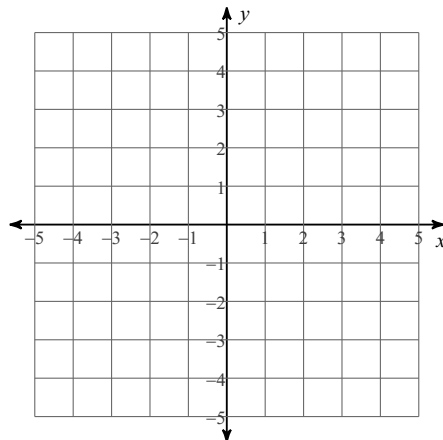
$$5x + 3y = -12$$



$$9) \begin{aligned} 2x - 3y &= 3 \\ 2x - 3y &= -3 \end{aligned}$$

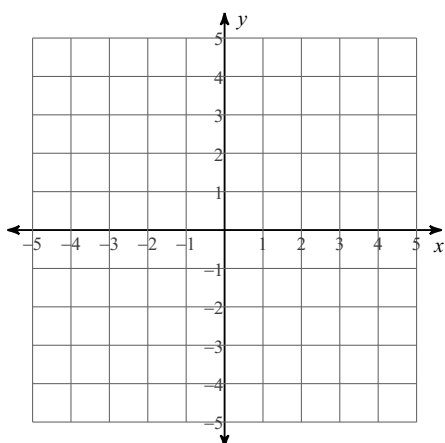


$$10) \begin{aligned} 3x - 4y &= -16 \\ x + 2y &= -2 \end{aligned}$$

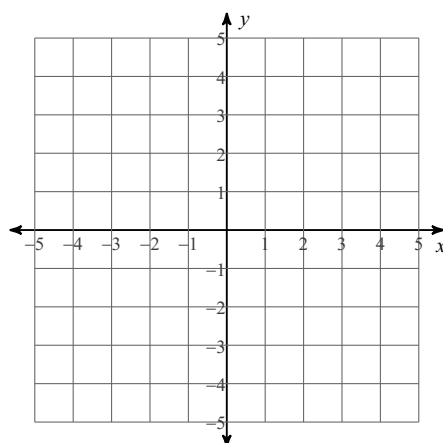


Sketch the solution to each system of inequalities.

$$11) \begin{aligned} y &\geq -\frac{5}{3}x + 3 \\ y &> \frac{1}{3}x - 3 \end{aligned}$$

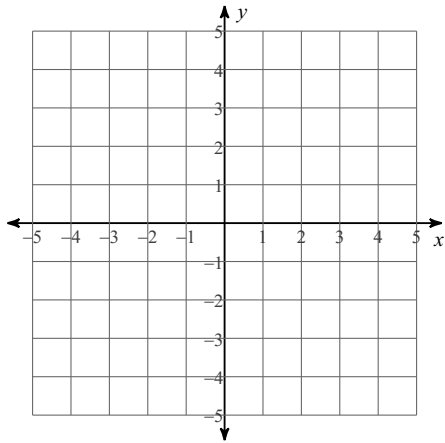


$$12) \begin{aligned} y &< \frac{4}{3}x - 2 \\ y &< \frac{1}{3}x + 1 \end{aligned}$$



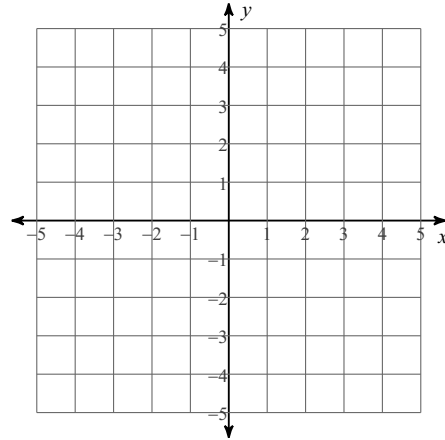
$$13) y \geq \frac{1}{3}x + 2$$

$$y < -\frac{2}{3}x - 1$$



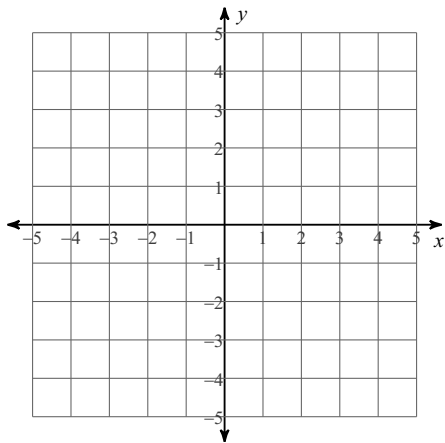
$$14) 5x + 3y < 9$$

$$5x + 3y < -9$$



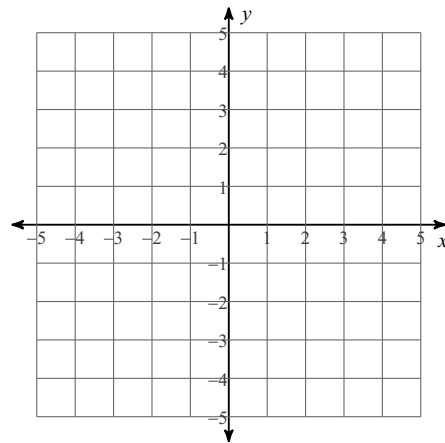
$$15) 2x + 3y \leq -3$$

$$2x - 3y > -9$$



$$16) x - y \geq -3$$

$$x \leq -1$$



# Answers to Systems of Equations & Inequalities by Graphing (ID: 1)

1)  $(-2, -4)$

9) No solution

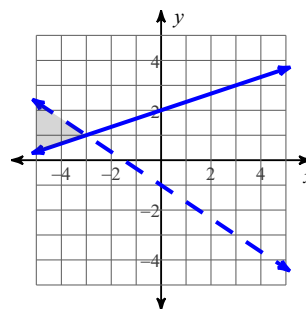
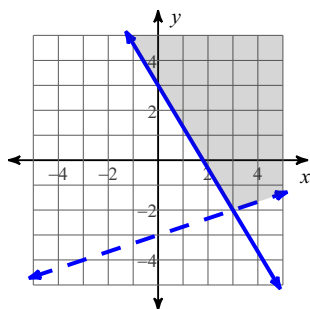
3)

11)

5)  $(3, 3)$

13)

7)  $(1, 4)$



15)

