



For each system of equations determine the point of intersection in a graph.

1)
$$\begin{cases} y = 0.3x - 4 \\ y = 1.5x + 8 \end{cases}$$

2)
$$\begin{cases} y = 0.8x + 3 \\ y = 0.2x + 6 \end{cases}$$

3)
$$\begin{cases} y = -0.4x - 4 \\ y = 0.2x - 7 \end{cases}$$

4)
$$\begin{cases} y = -0.5x + 8 \\ y = 0.6x - 3 \end{cases}$$

5)
$$\begin{cases} y = -0.3x - 4 \\ y = 0.5x + 4 \end{cases}$$

6)
$$\begin{cases} y = -0.2x - 6 \\ y = 0.3x - 1 \end{cases}$$

7)
$$\begin{cases} y = -0.5x + 7 \\ y = 0.7x - 5 \end{cases}$$

8)
$$\begin{cases} y = -1.75x - 4 \\ y = -0.25x + 2 \end{cases}$$

9)
$$\begin{cases} y = -0.4x - 1 \\ y = -0.3x + 0 \end{cases}$$

10)
$$\begin{cases} y = 0.5x - 4 \\ y = -0.5x + 4 \end{cases}$$

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____



For each system of equations determine the point of intersection in a graph.

$$1) \begin{cases} y = 0.3x - 4 \\ y = 1.5x + 8 \end{cases}$$

$$0.3x + -4 = 1.5x + 8$$

$$-1.2x = 12$$

$$1x = -10$$

$$y = (0.3 \times -10) + -4$$

$$y = (1.5 \times -10) + 8$$

$$2) \begin{cases} y = 0.8x + 3 \\ y = 0.2x + 6 \end{cases}$$

$$0.8x + 3 = 0.2x + 6$$

$$0.6x = 3$$

$$1x = 5$$

$$y = (0.8 \times 5) + 3$$

$$y = (0.2 \times 5) + 6$$

$$3) \begin{cases} y = -0.4x - 4 \\ y = 0.2x - 7 \end{cases}$$

$$-0.4x + -4 = 0.2x + -7$$

$$-0.6x = -3$$

$$1x = 5$$

$$y = (-0.4 \times 5) + -4$$

$$y = (0.2 \times 5) + -7$$

$$4) \begin{cases} y = -0.5x + 8 \\ y = 0.6x - 3 \end{cases}$$

$$-0.5x + 8 = 0.6x + -3$$

$$-1.1x = -11$$

$$1x = 10$$

$$y = (-0.5 \times 10) + 8$$

$$y = (0.6 \times 10) + -3$$

$$5) \begin{cases} y = -0.3x - 4 \\ y = 0.5x + 4 \end{cases}$$

$$-0.3x + -4 = 0.5x + 4$$

$$-0.8x = 8$$

$$1x = -10$$

$$y = (-0.3 \times -10) + -4$$

$$y = (0.5 \times -10) + 4$$

$$6) \begin{cases} y = -0.2x - 6 \\ y = 0.3x - 1 \end{cases}$$

$$-0.2x + -6 = 0.3x + -1$$

$$-0.5x = 5$$

$$1x = -10$$

$$y = (-0.2 \times -10) + -6$$

$$y = (0.3 \times -10) + -1$$

$$7) \begin{cases} y = -0.5x + 7 \\ y = 0.7x - 5 \end{cases}$$

$$-0.5x + 7 = 0.7x + -5$$

$$-1.2x = -12$$

$$1x = 10$$

$$y = (-0.5 \times 10) + 7$$

$$y = (0.7 \times 10) + -5$$

$$8) \begin{cases} y = -1.75x - 4 \\ y = -0.25x + 2 \end{cases}$$

$$-1.75x + -4 = -0.25x + 2$$

$$-1.5x = 6$$

$$1x = -4$$

$$y = (-1.75 \times -4) + -4$$

$$y = (-0.25 \times -4) + 2$$

$$9) \begin{cases} y = -0.4x - 1 \\ y = -0.3x + 0 \end{cases}$$

$$-0.4x + -1 = -0.3x + 0$$

$$-0.1x = 1$$

$$1x = -10$$

$$y = (-0.4 \times -10) + -1$$

$$y = (-0.3 \times -10) + 0$$

$$10) \begin{cases} y = 0.5x - 4 \\ y = -0.5x + 4 \end{cases}$$

$$0.5x + -4 = -0.5x + 4$$

$$1x = 8$$

$$1x = 8$$

$$y = (0.5 \times 8) + -4$$

$$y = (-0.5 \times 8) + 4$$

Answers

1. **(-10, -7)**

2. **(5, 7)**

3. **(5, -6)**

4. **(10, 3)**

5. **(-10, -1)**

6. **(-10, -4)**

7. **(10, 2)**

8. **(-4, 3)**

9. **(-10, 3)**

10. **(8, 0)**