



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

1)
$$\begin{cases} y = 0.75x + 5 \\ y = 1.5x + 2 \end{cases}$$

2)
$$\begin{cases} y = 2.5x - 4 \\ y = 3.75x - 9 \end{cases}$$

3)
$$\begin{cases} y = 0.75x + 3 \\ y = 1.25x - 1 \end{cases}$$

4)
$$\begin{cases} y = -1.25x + 1 \\ y = -3.5x - 8 \end{cases}$$

5)
$$\begin{cases} y = 0.25x - 7 \\ y = -1.75x + 9 \end{cases}$$

6)
$$\begin{cases} y = -3.5x + 9 \\ y = -0.25x - 4 \end{cases}$$

7)
$$\begin{cases} y = 1.5x - 2 \\ y = 0.75x + 1 \end{cases}$$

8)
$$\begin{cases} y = 3.5x - 3 \\ y = 0.5x + 3 \end{cases}$$

9)
$$\begin{cases} y = 0.9x + 6 \\ y = 0.5x + 2 \end{cases}$$

10)
$$\begin{cases} y = -2.5x - 9 \\ y = 1.25x + 6 \end{cases}$$

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)
$$\begin{cases} y = 0.75x + 5 \\ y = 1.5x + 2 \end{cases}$$

$$0.75x + 5 = 1.5x + 2$$

$$-0.75x = -3$$

$$1x = 4$$

$$y = (0.75 \times 4) + 5$$

$$y = (1.5 \times 4) + 2$$

2)
$$\begin{cases} y = 2.5x - 4 \\ y = 3.75x - 9 \end{cases}$$

$$2.5x - 4 = 3.75x - 9$$

$$-1.25x = -5$$

$$1x = 4$$

$$y = (2.5 \times 4) - 4$$

$$y = (3.75 \times 4) - 9$$

3)
$$\begin{cases} y = 0.75x + 3 \\ y = 1.25x - 1 \end{cases}$$

$$0.75x + 3 = 1.25x - 1$$

$$-0.5x = -4$$

$$1x = 8$$

$$y = (0.75 \times 8) + 3$$

$$y = (1.25 \times 8) - 1$$

4)
$$\begin{cases} y = -1.25x + 1 \\ y = -3.5x - 8 \end{cases}$$

$$-1.25x + 1 = -3.5x - 8$$

$$2.25x = -9$$

$$1x = -4$$

$$y = (-1.25 \times -4) + 1$$

$$y = (-3.5 \times -4) - 8$$

5)
$$\begin{cases} y = 0.25x - 7 \\ y = -1.75x + 9 \end{cases}$$

$$0.25x - 7 = -1.75x + 9$$

$$2x = 16$$

$$1x = 8$$

$$y = (0.25 \times 8) - 7$$

$$y = (-1.75 \times 8) + 9$$

6)
$$\begin{cases} y = -3.5x + 9 \\ y = -0.25x - 4 \end{cases}$$

$$-3.5x + 9 = -0.25x - 4$$

$$-3.25x = -13$$

$$1x = 4$$

$$y = (-3.5 \times 4) + 9$$

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

7)
$$\begin{cases} y = 1.5x - 2 \\ y = 0.75x + 1 \end{cases}$$

$$1.5x - 2 = 0.75x + 1$$

$$0.75x = 3$$

$$1x = 4$$

$$y = (1.5 \times 4) - 2$$

$$y = (0.75 \times 4) + 1$$

8)
$$\begin{cases} y = 3.5x - 3 \\ y = 0.5x + 3 \end{cases}$$

$$3.5x - 3 = 0.5x + 3$$

$$3x = 6$$

$$1x = 2$$

$$y = (3.5 \times 2) - 3$$

$$y = (0.5 \times 2) + 3$$

9)
$$\begin{cases} y = 0.9x + 6 \\ y = 0.5x + 2 \end{cases}$$

$$0.9x + 6 = 0.5x + 2$$

$$0.4x = -4$$

$$1x = -10$$

$$y = (0.9 \times -10) + 6$$

$$y = (0.5 \times -10) + 2$$

10)
$$\begin{cases} y = -2.5x - 9 \\ y = 1.25x + 6 \end{cases}$$

$$-2.5x - 9 = 1.25x + 6$$

$$-3.75x = 15$$

$$1x = -4$$

$$y = (-2.5 \times -4) - 9$$

$$y = (1.25 \times -4) + 6$$

Answers

1. (4, 8)

2. (4, 6)

3. (8, 9)

4. (-4, 6)

5. (8, -5)

6. (4, -5)

7. (4, 4)

8. (2, 4)

9. (-10, -3)

10. (-4, 1)