



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

Answers

1)
$$\begin{cases} y = 0.5x - 2 \\ y = 1.75x + 3 \end{cases}$$

2)
$$\begin{cases} y = 1.8x + 9 \\ y = 0.2x - 7 \end{cases}$$

1. _____

2. _____

3. _____

4. _____

3)
$$\begin{cases} y = -0.75x - 8 \\ y = 2.75x + 6 \end{cases}$$

4)
$$\begin{cases} y = 2.75x + 8 \\ y = -1.25x - 8 \end{cases}$$

5. _____

6. _____

7. _____

8. _____

5)
$$\begin{cases} y = -0.4x + 6 \\ y = -0.1x + 3 \end{cases}$$

6)
$$\begin{cases} y = 0.5x + 4 \\ y = 0.9x + 0 \end{cases}$$

9. _____

10. _____

7)
$$\begin{cases} y = -4.75x + 9 \\ y = -1.75x - 3 \end{cases}$$

8)
$$\begin{cases} y = -1.5x + 6 \\ y = 1.5x + 0 \end{cases}$$

9)
$$\begin{cases} y = 0.2x - 1 \\ y = 0.8x + 5 \end{cases}$$

10)
$$\begin{cases} y = 2.5x + 7 \\ y = -1.25x - 8 \end{cases}$$



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

Answers

$$1) \begin{cases} y = 0.5x - 2 \\ y = 1.75x + 3 \end{cases}$$

$$0.5x - 2 = 1.75x + 3$$

$$-1.25x = 5$$

$$1x = -4$$

$$y = (0.5 \times -4) - 2$$

$$y = (1.75 \times -4) + 3$$

$$2) \begin{cases} y = 1.8x + 9 \\ y = 0.2x - 7 \end{cases}$$

$$1.8x + 9 = 0.2x - 7$$

$$1.6x = -16$$

$$1x = -10$$

$$y = (1.8 \times -10) + 9$$

$$y = (0.2 \times -10) - 7$$

$$3) \begin{cases} y = -0.75x - 8 \\ y = 2.75x + 6 \end{cases}$$

$$-0.75x - 8 = 2.75x + 6$$

$$-3.5x = 14$$

$$1x = -4$$

$$y = (-0.75 \times -4) - 8$$

$$y = (2.75 \times -4) + 6$$

$$4) \begin{cases} y = 2.75x + 8 \\ y = -1.25x - 8 \end{cases}$$

$$2.75x + 8 = -1.25x - 8$$

$$4x = -16$$

$$1x = -4$$

$$y = (2.75 \times -4) + 8$$

$$y = (-1.25 \times -4) - 8$$

$$5) \begin{cases} y = -0.4x + 6 \\ y = -0.1x + 3 \end{cases}$$

$$-0.4x + 6 = -0.1x + 3$$

$$-0.3x = -3$$

$$1x = 10$$

$$y = (-0.4 \times 10) + 6$$

$$y = (-0.1 \times 10) + 3$$

$$6) \begin{cases} y = 0.5x + 4 \\ y = 0.9x + 0 \end{cases}$$

$$0.5x + 4 = 0.9x + 0$$

$$-0.4x = -4$$

$$1x = 10$$

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

$$y = (0.9 \times 10) + 0$$

$$7) \begin{cases} y = -4.75x + 9 \\ y = -1.75x - 3 \end{cases}$$

$$-4.75x + 9 = -1.75x - 3$$

$$-3x = -12$$

$$1x = 4$$

$$y = (-4.75 \times 4) + 9$$

$$y = (-1.75 \times 4) - 3$$

$$8) \begin{cases} y = -1.5x + 6 \\ y = 1.5x + 0 \end{cases}$$

$$-1.5x + 6 = 1.5x + 0$$

$$-3x = -6$$

$$1x = 2$$

$$y = (-1.5 \times 2) + 6$$

$$y = (1.5 \times 2) + 0$$

$$9) \begin{cases} y = 0.2x - 1 \\ y = 0.8x + 5 \end{cases}$$

$$0.2x - 1 = 0.8x + 5$$

$$-0.6x = 6$$

$$1x = -10$$

$$y = (0.2 \times -10) - 1$$

$$y = (0.8 \times -10) + 5$$

$$10) \begin{cases} y = 2.5x + 7 \\ y = -1.25x - 8 \end{cases}$$

$$2.5x + 7 = -1.25x - 8$$

$$3.75x = -15$$

$$1x = -4$$

$$y = (2.5 \times -4) + 7$$

$$y = (-1.25 \times -4) - 8$$

1. **(-4, -4)**

2. **(-10, -9)**

3. **(-4, -5)**

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

5. **(10, 2)**

6. **(10, 9)**

7. **(4, -10)**

8. **(2, 3)**

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

10. **(-4, -3)**