



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

Answers

1)
$$\begin{cases} y = -0.2x - 2 \\ y = -0.4x - 4 \end{cases}$$

2)
$$\begin{cases} y = -4.25x - 8 \\ y = -0.25x + 8 \end{cases}$$

1. _____

2. _____

3. _____

4. _____

3)
$$\begin{cases} y = 3.5x + 5 \\ y = 3.25x + 4 \end{cases}$$

4)
$$\begin{cases} y = 6.5x + 9 \\ y = 4.5x + 5 \end{cases}$$

5. _____

6. _____

7. _____

8. _____

5)
$$\begin{cases} y = -2.5x - 8 \\ y = -0.5x - 4 \end{cases}$$

6)
$$\begin{cases} y = 0.5x - 6 \\ y = 5.5x + 4 \end{cases}$$

9. _____

10. _____

7)
$$\begin{cases} y = -0.1x + 5 \\ y = 0.6x - 2 \end{cases}$$

8)
$$\begin{cases} y = 1.5x - 7 \\ y = 0.1x + 7 \end{cases}$$

9)
$$\begin{cases} y = 0.3x - 5 \\ y = -0.3x + 1 \end{cases}$$

10)
$$\begin{cases} y = 1.8x - 2 \\ y = 0.4x + 5 \end{cases}$$



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

Answers

$$1) \begin{cases} y = -0.2x - 2 \\ y = -0.4x - 4 \end{cases}$$

$$-0.2x - 2 = -0.4x - 4$$

$$0.2x = -2$$

$$1x = -10$$

$$y = (-0.2 \times -10) - 2$$

$$y = (-0.4 \times -10) - 4$$

$$2) \begin{cases} y = -4.25x - 8 \\ y = -0.25x + 8 \end{cases}$$

$$-4.25x - 8 = -0.25x + 8$$

$$-4x = 16$$

$$1x = -4$$

$$y = (-4.25 \times -4) - 8$$

$$y = (-0.25 \times -4) + 8$$

$$3) \begin{cases} y = 3.5x + 5 \\ y = 3.25x + 4 \end{cases}$$

$$3.5x + 5 = 3.25x + 4$$

$$0.25x = -1$$

$$1x = -4$$

$$y = (3.5 \times -4) + 5$$

$$y = (3.25 \times -4) + 4$$

$$4) \begin{cases} y = 6.5x + 9 \\ y = 4.5x + 5 \end{cases}$$

$$6.5x + 9 = 4.5x + 5$$

$$2x = -4$$

$$1x = -2$$

$$y = (6.5 \times -2) + 9$$

$$y = (4.5 \times -2) + 5$$

$$5) \begin{cases} y = -2.5x - 8 \\ y = -0.5x - 4 \end{cases}$$

$$-2.5x - 8 = -0.5x - 4$$

$$-2x = 4$$

$$1x = -2$$

$$y = (-2.5 \times -2) - 8$$

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

$$6) \begin{cases} y = 0.5x - 6 \\ y = 5.5x + 4 \end{cases}$$

$$0.5x - 6 = 5.5x + 4$$

$$-5x = 10$$

$$1x = -2$$

$$y = (0.5 \times -2) - 6$$

$$y = (5.5 \times -2) + 4$$

$$7) \begin{cases} y = -0.1x + 5 \\ y = 0.6x - 2 \end{cases}$$

$$-0.1x + 5 = 0.6x - 2$$

$$-0.7x = -7$$

$$1x = 10$$

$$y = (-0.1 \times 10) + 5$$

$$y = (0.6 \times 10) - 2$$

$$8) \begin{cases} y = 1.5x - 7 \\ y = 0.1x + 7 \end{cases}$$

$$1.5x - 7 = 0.1x + 7$$

$$1.4x = 14$$

$$1x = 10$$

$$y = (1.5 \times 10) - 7$$

$$y = (0.1 \times 10) + 7$$

$$9) \begin{cases} y = 0.3x - 5 \\ y = -0.3x + 1 \end{cases}$$

$$0.3x - 5 = -0.3x + 1$$

$$0.6x = 6$$

$$1x = 10$$

$$y = (0.3 \times 10) - 5$$

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

$$10) \begin{cases} y = 1.8x - 2 \\ y = 0.4x + 5 \end{cases}$$

$$1.8x - 2 = 0.4x + 5$$

$$1.4x = 7$$

$$1x = 5$$

$$y = (1.8 \times 5) - 2$$

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

1. **(-10, 0)**
2. **(-4, 9)**
3. **(-4, -9)**
4. **(-2, -4)**
5. **(-2, -3)**
6. **(-2, -7)**
7. **(10, 4)**
8. **(10, 8)**
9. **(10, -2)**
10. **(5, 7)**