



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)**