



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

Answers

1)
$$\begin{cases} y = 0.2x - 9 \\ y = 1.8x - 1 \end{cases}$$

2)
$$\begin{cases} y = 0.7x + 0 \\ y = 1.5x - 8 \end{cases}$$

3)
$$\begin{cases} y = 0.25x + 3 \\ y = -1.25x - 3 \end{cases}$$

4)
$$\begin{cases} y = -0.25x - 9 \\ y = -3.75x + 5 \end{cases}$$

5)
$$\begin{cases} y = 0.7x - 2 \\ y = 0.4x - 5 \end{cases}$$

6)
$$\begin{cases} y = 0.3x - 2 \\ y = 0.6x - 5 \end{cases}$$

7)
$$\begin{cases} y = -0.75x - 3 \\ y = -1.75x + 1 \end{cases}$$

8)
$$\begin{cases} y = -2.5x - 5 \\ y = -1.75x - 2 \end{cases}$$

9)
$$\begin{cases} y = 0.4x + 4 \\ y = -0.4x - 4 \end{cases}$$

10)
$$\begin{cases} y = -1.25x + 6 \\ y = 0.5x - 1 \end{cases}$$

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____



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

Answers

1) $\begin{cases} y = 0.2x - 9 \\ y = 1.8x - 1 \end{cases}$
 $0.2x - 9 = 1.8x - 1$
 $-1.6x = 8$
 $1x = -5$
 $y = (0.2 \times -5) - 9$
 $y = (1.8 \times -5) - 1$

2) $\begin{cases} y = 0.7x + 0 \\ y = 1.5x - 8 \end{cases}$
 $0.7x + 0 = 1.5x - 8$
 $-0.8x = -8$
 $1x = 10$
 $y = (0.7 \times 10) + 0$
 $y = (1.5 \times 10) - 8$

3) $\begin{cases} y = 0.25x + 3 \\ y = -1.25x - 3 \end{cases}$
 $0.25x + 3 = -1.25x - 3$
 $1.5x = -6$
 $1x = -4$
 $y = (0.25 \times -4) + 3$
 $y = (-1.25 \times -4) - 3$

4) $\begin{cases} y = -0.25x - 9 \\ y = -3.75x + 5 \end{cases}$
 $-0.25x - 9 = -3.75x + 5$
 $3.5x = 14$
 $1x = 4$
 $y = (-0.25 \times 4) - 9$
 $y = (-3.75 \times 4) + 5$

5) $\begin{cases} y = 0.7x - 2 \\ y = 0.4x - 5 \end{cases}$
 $0.7x - 2 = 0.4x - 5$
 $0.3x = -3$
 $1x = -10$
 $y = (0.7 \times -10) - 2$
 $y = (0.4 \times -10) - 5$

6) $\begin{cases} y = 0.3x - 2 \\ y = 0.6x - 5 \end{cases}$
 $0.3x - 2 = 0.6x - 5$
 $-0.3x = -3$
 $1x = 10$
 $y = (0.3 \times 10) - 2$
 $y = (0.6 \times 10) - 5$

7) $\begin{cases} y = -0.75x - 3 \\ y = -1.75x + 1 \end{cases}$
 $-0.75x - 3 = -1.75x + 1$
 $1x = 4$
 $1x = 4$
 $y = (-0.75 \times 4) - 3$
 $y = (-1.75 \times 4) + 1$

8) $\begin{cases} y = -2.5x - 5 \\ y = -1.75x - 2 \end{cases}$
 $-2.5x - 5 = -1.75x - 2$
 $-0.75x = 3$
 $1x = -4$
 $y = (-2.5 \times -4) - 5$
 $y = (-1.75 \times -4) - 2$

9) $\begin{cases} y = 0.4x + 4 \\ y = -0.4x - 4 \end{cases}$
 $0.4x + 4 = -0.4x - 4$
 $0.8x = -8$
 $1x = -10$
 $y = (0.4 \times -10) + 4$
 $y = (-0.4 \times -10) - 4$

10) $\begin{cases} y = -1.25x + 6 \\ y = 0.5x - 1 \end{cases}$
 $-1.25x + 6 = 0.5x - 1$
 $-1.75x = -7$
 $1x = 4$
 $y = (-1.25 \times 4) + 6$
 $y = (0.5 \times 4) - 1$

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