



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)**