



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

Answers

1)
$$\begin{cases} y = 1.5x + 2 \\ y = 5.5x - 6 \end{cases}$$

2)
$$\begin{cases} y = 0.7x - 2 \\ y = 0.6x - 3 \end{cases}$$

1. _____

2. _____

3. _____

4. _____

3)
$$\begin{cases} y = -0.5x - 4 \\ y = -0.6x - 3 \end{cases}$$

4)
$$\begin{cases} y = -4.5x - 9 \\ y = -3.25x - 4 \end{cases}$$

5. _____

6. _____

7. _____

8. _____

5)
$$\begin{cases} y = -0.5x - 5 \\ y = 0.9x + 9 \end{cases}$$

6)
$$\begin{cases} y = 0.1x - 1 \\ y = -0.5x + 5 \end{cases}$$

9. _____

10. _____

7)
$$\begin{cases} y = 0.1x + 9 \\ y = -0.2x + 6 \end{cases}$$

8)
$$\begin{cases} y = 0.5x - 5 \\ y = 0.75x - 7 \end{cases}$$

9)
$$\begin{cases} y = -0.5x + 2 \\ y = 2.25x - 9 \end{cases}$$

10)
$$\begin{cases} y = 4.25x - 9 \\ y = 3.25x - 5 \end{cases}$$



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

Answers

1) $\begin{cases} y = 1.5x + 2 \\ y = 5.5x - 6 \end{cases}$
 $1.5x + 2 = 5.5x - 6$
 $-4x = -8$
 $1x = 2$
 $y = (1.5 \times 2) + 2$
 $y = (5.5 \times 2) - 6$

2) $\begin{cases} y = 0.7x - 2 \\ y = 0.6x - 3 \end{cases}$
 $0.7x - 2 = 0.6x - 3$
 $0.1x = -1$
 $1x = -10$
 $y = (0.7 \times -10) - 2$
 $y = (0.6 \times -10) - 3$

3) $\begin{cases} y = -0.5x - 4 \\ y = -0.6x - 3 \end{cases}$
 $-0.5x - 4 = -0.6x - 3$
 $0.1x = 1$
 $1x = 10$
 $y = (-0.5 \times 10) - 4$
 $y = (-0.6 \times 10) - 3$

4) $\begin{cases} y = -4.5x - 9 \\ y = -3.25x - 4 \end{cases}$
 $-4.5x - 9 = -3.25x - 4$
 $-1.25x = 5$
 $1x = -4$
 $y = (-4.5 \times -4) - 9$
 $y = (-3.25 \times -4) - 4$

5) $\begin{cases} y = -0.5x - 5 \\ y = 0.9x + 9 \end{cases}$
 $-0.5x - 5 = 0.9x + 9$
 $-1.4x = 14$
 $1x = -10$
 $y = (-0.5 \times -10) - 5$
 $y = (0.9 \times -10) + 9$

6) $\begin{cases} y = 0.1x - 1 \\ y = -0.5x + 5 \end{cases}$
 $0.1x - 1 = -0.5x + 5$
 $0.6x = 6$
 $1x = 10$
 $y = (0.1 \times 10) - 1$
 $y = (-0.5 \times 10) + 5$

7) $\begin{cases} y = 0.1x + 9 \\ y = -0.2x + 6 \end{cases}$
 $0.1x + 9 = -0.2x + 6$
 $0.3x = -3$
 $1x = -10$
 $y = (0.1 \times -10) + 9$
 $y = (-0.2 \times -10) + 6$

8) $\begin{cases} y = 0.5x - 5 \\ y = 0.75x - 7 \end{cases}$
 $0.5x - 5 = 0.75x - 7$
 $-0.25x = -2$
 $1x = 8$
 $y = (0.5 \times 8) - 5$
 $y = (0.75 \times 8) - 7$

9) $\begin{cases} y = -0.5x + 2 \\ y = 2.25x - 9 \end{cases}$
 $-0.5x + 2 = 2.25x - 9$
 $-2.75x = -11$
 $1x = 4$
 $y = (-0.5 \times 4) + 2$
 $y = (2.25 \times 4) - 9$

10) $\begin{cases} y = 4.25x - 9 \\ y = 3.25x - 5 \end{cases}$
 $4.25x - 9 = 3.25x - 5$
 $1x = 4$
 $1x = 4$
 $y = (4.25 \times 4) - 9$
 $y = (3.25 \times 4) - 5$

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



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

Answers

1)
$$\begin{cases} y = -0.1x - 3 \\ y = 0.6x + 4 \end{cases}$$

2)
$$\begin{cases} y = -0.1x - 9 \\ y = 0.1x - 7 \end{cases}$$

1. _____

2. _____

3. _____

4. _____

3)
$$\begin{cases} y = -4.25x + 9 \\ y = -0.75x - 5 \end{cases}$$

4)
$$\begin{cases} y = -1.5x + 8 \\ y = -0.25x - 2 \end{cases}$$

5. _____

6. _____

7. _____

8. _____

5)
$$\begin{cases} y = -2.5x - 8 \\ y = -1.5x - 6 \end{cases}$$

6)
$$\begin{cases} y = -2.25x - 5 \\ y = -2.5x - 6 \end{cases}$$

9. _____

10. _____

7)
$$\begin{cases} y = -2.25x - 5 \\ y = -2.75x - 7 \end{cases}$$

8)
$$\begin{cases} y = -2.5x - 5 \\ y = -9.5x + 9 \end{cases}$$

9)
$$\begin{cases} y = 0.7x - 2 \\ y = -0.4x + 9 \end{cases}$$

10)
$$\begin{cases} y = -0.1x + 4 \\ y = 0.8x - 5 \end{cases}$$



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

Answers

1) $\begin{cases} y = -0.1x - 3 \\ y = 0.6x + 4 \end{cases}$
 $-0.1x - 3 = 0.6x + 4$
 $-0.7x = 7$
 $1x = -10$
 $y = (-0.1 \times -10) - 3$
 $y = (0.6 \times -10) + 4$

2) $\begin{cases} y = -0.1x - 9 \\ y = 0.1x - 7 \end{cases}$
 $-0.1x - 9 = 0.1x - 7$
 $-0.2x = 2$
 $1x = -10$
 $y = (-0.1 \times -10) - 9$
 $y = (0.1 \times -10) - 7$

3) $\begin{cases} y = -4.25x + 9 \\ y = -0.75x - 5 \end{cases}$
 $-4.25x + 9 = -0.75x - 5$
 $-3.5x = -14$
 $1x = 4$
 $y = (-4.25 \times 4) + 9$
 $y = (-0.75 \times 4) - 5$

4) $\begin{cases} y = -1.5x + 8 \\ y = -0.25x - 2 \end{cases}$
 $-1.5x + 8 = -0.25x - 2$
 $-1.25x = -10$
 $1x = 8$
 $y = (-1.5 \times 8) + 8$
 $y = (-0.25 \times 8) - 2$

5) $\begin{cases} y = -2.5x - 8 \\ y = -1.5x - 6 \end{cases}$
 $-2.5x - 8 = -1.5x - 6$
 $-1x = 2$
 $1x = -2$
 $y = (-2.5 \times -2) - 8$
 $y = (-1.5 \times -2) - 6$

6) $\begin{cases} y = -2.25x - 5 \\ y = -2.5x - 6 \end{cases}$
 $-2.25x - 5 = -2.5x - 6$
 $0.25x = -1$
 $1x = -4$
 $y = (-2.25 \times -4) - 5$
 $y = (-2.5 \times -4) - 6$

7) $\begin{cases} y = -2.25x - 5 \\ y = -2.75x - 7 \end{cases}$
 $-2.25x - 5 = -2.75x - 7$
 $0.5x = -2$
 $1x = -4$
 $y = (-2.25 \times -4) - 5$
 $y = (-2.75 \times -4) - 7$

8) $\begin{cases} y = -2.5x - 5 \\ y = -9.5x + 9 \end{cases}$
 $-2.5x - 5 = -9.5x + 9$
 $7x = 14$
 $1x = 2$
 $y = (-2.5 \times 2) - 5$
 $y = (-9.5 \times 2) + 9$

9) $\begin{cases} y = 0.7x - 2 \\ y = -0.4x + 9 \end{cases}$
 $0.7x - 2 = -0.4x + 9$
 $1.1x = 11$
 $1x = 10$
 $y = (0.7 \times 10) - 2$
 $y = (-0.4 \times 10) + 9$

10) $\begin{cases} y = -0.1x + 4 \\ y = 0.8x - 5 \end{cases}$
 $-0.1x + 4 = 0.8x - 5$
 $-0.9x = -9$
 $1x = 10$
 $y = (-0.1 \times 10) + 4$
 $y = (0.8 \times 10) - 5$

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



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

Answers

1)
$$\begin{cases} y = -1.3x - 3 \\ y = -0.4x + 6 \end{cases}$$

2)
$$\begin{cases} y = 1.75x + 1 \\ y = 3.25x - 5 \end{cases}$$

1. _____

2. _____

3. _____

4. _____

3)
$$\begin{cases} y = -1.5x + 4 \\ y = -1.75x + 5 \end{cases}$$

4)
$$\begin{cases} y = 1.25x + 2 \\ y = 0.5x - 1 \end{cases}$$

5. _____

6. _____

7. _____

8. _____

5)
$$\begin{cases} y = -0.25x + 8 \\ y = -2.25x + 0 \end{cases}$$

6)
$$\begin{cases} y = 0.25x + 7 \\ y = -0.5x + 4 \end{cases}$$

9. _____

10. _____

7)
$$\begin{cases} y = -0.25x - 5 \\ y = -0.75x - 9 \end{cases}$$

8)
$$\begin{cases} y = 0.7x - 3 \\ y = 0.6x - 2 \end{cases}$$

9)
$$\begin{cases} y = 0.25x + 2 \\ y = 0.5x + 1 \end{cases}$$

10)
$$\begin{cases} y = -2.5x + 0 \\ y = -0.5x + 8 \end{cases}$$



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

Answers

1) $\begin{cases} y = -1.3x - 3 \\ y = -0.4x + 6 \end{cases}$
 $-1.3x - 3 = -0.4x + 6$
 $-0.9x = 9$
 $1x = -10$
 $y = (-1.3 \times -10) - 3$
 $y = (-0.4 \times -10) + 6$

2) $\begin{cases} y = 1.75x + 1 \\ y = 3.25x - 5 \end{cases}$
 $1.75x + 1 = 3.25x - 5$
 $-1.5x = -6$
 $1x = 4$
 $y = (1.75 \times 4) + 1$
 $y = (3.25 \times 4) - 5$

3) $\begin{cases} y = -1.5x + 4 \\ y = -1.75x + 5 \end{cases}$
 $-1.5x + 4 = -1.75x + 5$
 $0.25x = 1$
 $1x = 4$
 $y = (-1.5 \times 4) + 4$
 $y = (-1.75 \times 4) + 5$

4) $\begin{cases} y = 1.25x + 2 \\ y = 0.5x - 1 \end{cases}$
 $1.25x + 2 = 0.5x - 1$
 $0.75x = -3$
 $1x = -4$
 $y = (1.25 \times -4) + 2$
 $y = (0.5 \times -4) - 1$

5) $\begin{cases} y = -0.25x + 8 \\ y = -2.25x + 0 \end{cases}$
 $-0.25x + 8 = -2.25x + 0$
 $2x = -8$
 $1x = -4$
 $y = (-0.25 \times -4) + 8$
 $y = (-2.25 \times -4) + 0$

6) $\begin{cases} y = 0.25x + 7 \\ y = -0.5x + 4 \end{cases}$
 $0.25x + 7 = -0.5x + 4$
 $0.75x = -3$
 $1x = -4$
 $y = (0.25 \times -4) + 7$
 $y = (-0.5 \times -4) + 4$

7) $\begin{cases} y = -0.25x - 5 \\ y = -0.75x - 9 \end{cases}$
 $-0.25x - 5 = -0.75x - 9$
 $0.5x = -4$
 $1x = -8$
 $y = (-0.25 \times -8) - 5$
 $y = (-0.75 \times -8) - 9$

8) $\begin{cases} y = 0.7x - 3 \\ y = 0.6x - 2 \end{cases}$
 $0.7x - 3 = 0.6x - 2$
 $0.1x = 1$
 $1x = 10$
 $y = (0.7 \times 10) - 3$
 $y = (0.6 \times 10) - 2$

9) $\begin{cases} y = 0.25x + 2 \\ y = 0.5x + 1 \end{cases}$
 $0.25x + 2 = 0.5x + 1$
 $-0.25x = -1$
 $1x = 4$
 $y = (0.25 \times 4) + 2$
 $y = (0.5 \times 4) + 1$

10) $\begin{cases} y = -2.5x + 0 \\ y = -0.5x + 8 \end{cases}$
 $-2.5x + 0 = -0.5x + 8$
 $-2x = 8$
 $1x = -4$
 $y = (-2.5 \times -4) + 0$
 $y = (-0.5 \times -4) + 8$

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



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

Answers

1)
$$\begin{cases} y = 1.25x - 8 \\ y = 0.25x + 0 \end{cases}$$

2)
$$\begin{cases} y = 0.8x + 5 \\ y = 0.2x - 1 \end{cases}$$

1. _____

2. _____

3. _____

4. _____

3)
$$\begin{cases} y = -2.25x - 3 \\ y = -2.5x - 4 \end{cases}$$

4)
$$\begin{cases} y = 5.5x - 1 \\ y = 8.5x - 7 \end{cases}$$

5. _____

6. _____

7. _____

8. _____

5)
$$\begin{cases} y = -3.75x - 5 \\ y = -1.25x + 5 \end{cases}$$

6)
$$\begin{cases} y = -0.6x + 3 \\ y = 0.2x - 1 \end{cases}$$

9. _____

10. _____

7)
$$\begin{cases} y = 0.7x - 5 \\ y = 0.9x - 7 \end{cases}$$

8)
$$\begin{cases} y = -2.25x + 1 \\ y = -4.25x - 7 \end{cases}$$

9)
$$\begin{cases} y = 0.75x + 1 \\ y = 1.75x + 9 \end{cases}$$

10)
$$\begin{cases} y = -1.75x + 8 \\ y = -1.25x + 4 \end{cases}$$



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

Answers

1) $\begin{cases} y = 1.25x - 8 \\ y = 0.25x + 0 \end{cases}$
 $1.25x - 8 = 0.25x + 0$
 $1x = 8$
 $1x = 8$
 $y = (1.25 \times 8) - 8$
 $y = (0.25 \times 8) + 0$

2) $\begin{cases} y = 0.8x + 5 \\ y = 0.2x - 1 \end{cases}$
 $0.8x + 5 = 0.2x - 1$
 $0.6x = -6$
 $1x = -10$
 $y = (0.8 \times -10) + 5$
 $y = (0.2 \times -10) - 1$

3) $\begin{cases} y = -2.25x - 3 \\ y = -2.5x - 4 \end{cases}$
 $-2.25x - 3 = -2.5x - 4$
 $0.25x = -1$
 $1x = -4$
 $y = (-2.25 \times -4) - 3$
 $y = (-2.5 \times -4) - 4$

4) $\begin{cases} y = 5.5x - 1 \\ y = 8.5x - 7 \end{cases}$
 $5.5x - 1 = 8.5x - 7$
 $-3x = -6$
 $1x = 2$
 $y = (5.5 \times 2) - 1$
 $y = (8.5 \times 2) - 7$

5) $\begin{cases} y = -3.75x - 5 \\ y = -1.25x + 5 \end{cases}$
 $-3.75x - 5 = -1.25x + 5$
 $-2.5x = 10$
 $1x = -4$
 $y = (-3.75 \times -4) - 5$
 $y = (-1.25 \times -4) + 5$

6) $\begin{cases} y = -0.6x + 3 \\ y = 0.2x - 1 \end{cases}$
 $-0.6x + 3 = 0.2x - 1$
 $-0.8x = -4$
 $1x = 5$
 $y = (-0.6 \times 5) + 3$
 $y = (0.2 \times 5) - 1$

7) $\begin{cases} y = 0.7x - 5 \\ y = 0.9x - 7 \end{cases}$
 $0.7x - 5 = 0.9x - 7$
 $-0.2x = -2$
 $1x = 10$
 $y = (0.7 \times 10) - 5$
 $y = (0.9 \times 10) - 7$

8) $\begin{cases} y = -2.25x + 1 \\ y = -4.25x - 7 \end{cases}$
 $-2.25x + 1 = -4.25x - 7$
 $2x = -8$
 $1x = -4$
 $y = (-2.25 \times -4) + 1$
 $y = (-4.25 \times -4) - 7$

9) $\begin{cases} y = 0.75x + 1 \\ y = 1.75x + 9 \end{cases}$
 $0.75x + 1 = 1.75x + 9$
 $-1x = 8$
 $1x = -8$
 $y = (0.75 \times -8) + 1$
 $y = (1.75 \times -8) + 9$

10) $\begin{cases} y = -1.75x + 8 \\ y = -1.25x + 4 \end{cases}$
 $-1.75x + 8 = -1.25x + 4$
 $-0.5x = -4$
 $1x = 8$
 $y = (-1.75 \times 8) + 8$
 $y = (-1.25 \times 8) + 4$

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



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

Answers

1)
$$\begin{cases} y = 0.9x + 1 \\ y = 1.7x - 7 \end{cases}$$

2)
$$\begin{cases} y = -0.6x + 1 \\ y = -1.2x - 2 \end{cases}$$

1. _____

2. _____

3. _____

4. _____

3)
$$\begin{cases} y = 0.7x + 0 \\ y = 0.3x - 4 \end{cases}$$

4)
$$\begin{cases} y = -0.4x + 7 \\ y = -0.6x + 9 \end{cases}$$

5. _____

6. _____

7. _____

8. _____

5)
$$\begin{cases} y = -1.25x + 4 \\ y = -4.5x - 9 \end{cases}$$

6)
$$\begin{cases} y = 5.5x - 5 \\ y = -0.5x + 7 \end{cases}$$

9. _____

10. _____

7)
$$\begin{cases} y = 1.75x - 5 \\ y = 0.5x + 5 \end{cases}$$

8)
$$\begin{cases} y = -1.2x + 2 \\ y = -1.3x + 3 \end{cases}$$

9)
$$\begin{cases} y = -0.25x - 2 \\ y = 1.5x - 9 \end{cases}$$

10)
$$\begin{cases} y = -0.2x + 3 \\ y = -1.2x + 8 \end{cases}$$



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

Answers

1) $\begin{cases} y = 0.9x + 1 \\ y = 1.7x - 7 \end{cases}$
 $0.9x + 1 = 1.7x - 7$
 $-0.8x = -8$
 $1x = 10$
 $y = (0.9 \times 10) + 1$
 $y = (1.7 \times 10) - 7$

2) $\begin{cases} y = -0.6x + 1 \\ y = -1.2x - 2 \end{cases}$
 $-0.6x + 1 = -1.2x - 2$
 $0.6x = -3$
 $1x = -5$
 $y = (-0.6 \times -5) + 1$
 $y = (-1.2 \times -5) - 2$

3) $\begin{cases} y = 0.7x + 0 \\ y = 0.3x - 4 \end{cases}$
 $0.7x + 0 = 0.3x - 4$
 $0.4x = -4$
 $1x = -10$
 $y = (0.7 \times -10) + 0$
 $y = (0.3 \times -10) - 4$

4) $\begin{cases} y = -0.4x + 7 \\ y = -0.6x + 9 \end{cases}$
 $-0.4x + 7 = -0.6x + 9$
 $0.2x = 2$
 $1x = 10$
 $y = (-0.4 \times 10) + 7$
 $y = (-0.6 \times 10) + 9$

5) $\begin{cases} y = -1.25x + 4 \\ y = -4.5x - 9 \end{cases}$
 $-1.25x + 4 = -4.5x - 9$
 $3.25x = -13$
 $1x = -4$
 $y = (-1.25 \times -4) + 4$
 $y = (-4.5 \times -4) - 9$

6) $\begin{cases} y = 5.5x - 5 \\ y = -0.5x + 7 \end{cases}$
 $5.5x - 5 = -0.5x + 7$
 $6x = 12$
 $1x = 2$
 $y = (5.5 \times 2) - 5$
 $y = (-0.5 \times 2) + 7$

7) $\begin{cases} y = 1.75x - 5 \\ y = 0.5x + 5 \end{cases}$
 $1.75x - 5 = 0.5x + 5$
 $1.25x = 10$
 $1x = 8$
 $y = (1.75 \times 8) - 5$
 $y = (0.5 \times 8) + 5$

8) $\begin{cases} y = -1.2x + 2 \\ y = -1.3x + 3 \end{cases}$
 $-1.2x + 2 = -1.3x + 3$
 $0.1x = 1$
 $1x = 10$
 $y = (-1.2 \times 10) + 2$
 $y = (-1.3 \times 10) + 3$

9) $\begin{cases} y = -0.25x - 2 \\ y = 1.5x - 9 \end{cases}$
 $-0.25x - 2 = 1.5x - 9$
 $-1.75x = -7$
 $1x = 4$
 $y = (-0.25 \times 4) - 2$
 $y = (1.5 \times 4) - 9$

10) $\begin{cases} y = -0.2x + 3 \\ y = -1.2x + 8 \end{cases}$
 $-0.2x + 3 = -1.2x + 8$
 $1x = 5$
 $1x = 5$
 $y = (-0.2 \times 5) + 3$
 $y = (-1.2 \times 5) + 8$

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



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

Answers

1)
$$\begin{cases} y = 0.1x + 2 \\ y = 0.5x - 2 \end{cases}$$

2)
$$\begin{cases} y = -1.3x + 5 \\ y = -0.4x - 4 \end{cases}$$

1. _____

2. _____

3. _____

4. _____

3)
$$\begin{cases} y = -0.2x + 8 \\ y = 1.5x - 9 \end{cases}$$

4)
$$\begin{cases} y = -4.25x + 8 \\ y = -2.5x + 1 \end{cases}$$

5. _____

6. _____

7. _____

8. _____

5)
$$\begin{cases} y = -1.5x - 3 \\ y = -0.5x + 5 \end{cases}$$

6)
$$\begin{cases} y = 0.3x - 9 \\ y = -0.5x - 1 \end{cases}$$

9. _____

10. _____

7)
$$\begin{cases} y = 0.3x + 1 \\ y = 0.5x - 1 \end{cases}$$

8)
$$\begin{cases} y = -0.2x + 0 \\ y = 0.4x - 6 \end{cases}$$

9)
$$\begin{cases} y = -1.5x + 1 \\ y = -3.5x - 3 \end{cases}$$

10)
$$\begin{cases} y = -0.25x - 2 \\ y = -0.5x + 0 \end{cases}$$



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

Answers

1) $\begin{cases} y = 0.1x + 2 \\ y = 0.5x - 2 \end{cases}$
 $0.1x + 2 = 0.5x - 2$
 $-0.4x = -4$
 $1x = 10$
 $y = (0.1 \times 10) + 2$
 $y = (0.5 \times 10) - 2$

2) $\begin{cases} y = -1.3x + 5 \\ y = -0.4x - 4 \end{cases}$
 $-1.3x + 5 = -0.4x - 4$
 $-0.9x = -9$
 $1x = 10$
 $y = (-1.3 \times 10) + 5$
 $y = (-0.4 \times 10) - 4$

3) $\begin{cases} y = -0.2x + 8 \\ y = 1.5x - 9 \end{cases}$
 $-0.2x + 8 = 1.5x - 9$
 $-1.7x = -17$
 $1x = 10$
 $y = (-0.2 \times 10) + 8$
 $y = (1.5 \times 10) - 9$

4) $\begin{cases} y = -4.25x + 8 \\ y = -2.5x + 1 \end{cases}$
 $-4.25x + 8 = -2.5x + 1$
 $-1.75x = -7$
 $1x = 4$
 $y = (-4.25 \times 4) + 8$
 $y = (-2.5 \times 4) + 1$

5) $\begin{cases} y = -1.5x - 3 \\ y = -0.5x + 5 \end{cases}$
 $-1.5x - 3 = -0.5x + 5$
 $-1x = 8$
 $1x = -8$
 $y = (-1.5 \times -8) - 3$
 $y = (-0.5 \times -8) + 5$

6) $\begin{cases} y = 0.3x - 9 \\ y = -0.5x - 1 \end{cases}$
 $0.3x - 9 = -0.5x - 1$
 $0.8x = 8$
 $1x = 10$
 $y = (0.3 \times 10) - 9$
 $y = (-0.5 \times 10) - 1$

7) $\begin{cases} y = 0.3x + 1 \\ y = 0.5x - 1 \end{cases}$
 $0.3x + 1 = 0.5x - 1$
 $-0.2x = -2$
 $1x = 10$
 $y = (0.3 \times 10) + 1$
 $y = (0.5 \times 10) - 1$

8) $\begin{cases} y = -0.2x + 0 \\ y = 0.4x - 6 \end{cases}$
 $-0.2x + 0 = 0.4x - 6$
 $-0.6x = -6$
 $1x = 10$
 $y = (-0.2 \times 10) + 0$
 $y = (0.4 \times 10) - 6$

9) $\begin{cases} y = -1.5x + 1 \\ y = -3.5x - 3 \end{cases}$
 $-1.5x + 1 = -3.5x - 3$
 $2x = -4$
 $1x = -2$
 $y = (-1.5 \times -2) + 1$
 $y = (-3.5 \times -2) - 3$

10) $\begin{cases} y = -0.25x - 2 \\ y = -0.5x + 0 \end{cases}$
 $-0.25x - 2 = -0.5x + 0$
 $0.25x = 2$
 $1x = 8$
 $y = (-0.25 \times 8) - 2$
 $y = (-0.5 \times 8) + 0$

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



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)**



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

Answers

1)
$$\begin{cases} y = -0.25x + 7 \\ y = 2.25x - 3 \end{cases}$$

2)
$$\begin{cases} y = -7.5x + 6 \\ y = -3.5x - 2 \end{cases}$$

1. _____

2. _____

3. _____

4. _____

3)
$$\begin{cases} y = 2.25x - 1 \\ y = 3.5x - 6 \end{cases}$$

4)
$$\begin{cases} y = -1.5x - 9 \\ y = -0.6x + 0 \end{cases}$$

5. _____

6. _____

7. _____

8. _____

5)
$$\begin{cases} y = 0.25x - 3 \\ y = -1.25x + 3 \end{cases}$$

6)
$$\begin{cases} y = -0.5x + 9 \\ y = 0.75x - 1 \end{cases}$$

9. _____

10. _____

7)
$$\begin{cases} y = -0.4x + 2 \\ y = 0.2x + 8 \end{cases}$$

8)
$$\begin{cases} y = 7.5x - 7 \\ y = 4.5x - 1 \end{cases}$$

9)
$$\begin{cases} y = -2.75x - 1 \\ y = -1.5x + 4 \end{cases}$$

10)
$$\begin{cases} y = -0.5x - 8 \\ y = 0.1x - 2 \end{cases}$$



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

Answers

1) $\begin{cases} y = -0.25x + 7 \\ y = 2.25x - 3 \end{cases}$
 $-0.25x + 7 = 2.25x - 3$
 $-2.5x = -10$
 $1x = 4$
 $y = (-0.25 \times 4) + 7$
 $y = (2.25 \times 4) - 3$

2) $\begin{cases} y = -7.5x + 6 \\ y = -3.5x - 2 \end{cases}$
 $-7.5x + 6 = -3.5x - 2$
 $-4x = -8$
 $1x = 2$
 $y = (-7.5 \times 2) + 6$
 $y = (-3.5 \times 2) - 2$

3) $\begin{cases} y = 2.25x - 1 \\ y = 3.5x - 6 \end{cases}$
 $2.25x - 1 = 3.5x - 6$
 $-1.25x = -5$
 $1x = 4$
 $y = (2.25 \times 4) - 1$
 $y = (3.5 \times 4) - 6$

4) $\begin{cases} y = -1.5x - 9 \\ y = -0.6x + 0 \end{cases}$
 $-1.5x - 9 = -0.6x + 0$
 $-0.9x = 9$
 $1x = -10$
 $y = (-1.5 \times -10) - 9$
 $y = (-0.6 \times -10) + 0$

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

6) $\begin{cases} y = -0.5x + 9 \\ y = 0.75x - 1 \end{cases}$
 $-0.5x + 9 = 0.75x - 1$
 $-1.25x = -10$
 $1x = 8$
 $y = (-0.5 \times 8) + 9$
 $y = (0.75 \times 8) - 1$

7) $\begin{cases} y = -0.4x + 2 \\ y = 0.2x + 8 \end{cases}$
 $-0.4x + 2 = 0.2x + 8$
 $-0.6x = 6$
 $1x = -10$
 $y = (-0.4 \times -10) + 2$
 $y = (0.2 \times -10) + 8$

8) $\begin{cases} y = 7.5x - 7 \\ y = 4.5x - 1 \end{cases}$
 $7.5x - 7 = 4.5x - 1$
 $3x = 6$
 $1x = 2$
 $y = (7.5 \times 2) - 7$
 $y = (4.5 \times 2) - 1$

9) $\begin{cases} y = -2.75x - 1 \\ y = -1.5x + 4 \end{cases}$
 $-2.75x - 1 = -1.5x + 4$
 $-1.25x = 5$
 $1x = -4$
 $y = (-2.75 \times -4) - 1$
 $y = (-1.5 \times -4) + 4$

10) $\begin{cases} y = -0.5x - 8 \\ y = 0.1x - 2 \end{cases}$
 $-0.5x - 8 = 0.1x - 2$
 $-0.6x = 6$
 $1x = -10$
 $y = (-0.5 \times -10) - 8$
 $y = (0.1 \times -10) - 2$

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



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

Answers

1)
$$\begin{cases} y = 1.5x - 8 \\ y = -0.1x + 8 \end{cases}$$

2)
$$\begin{cases} y = -1.3x - 6 \\ y = -0.1x + 6 \end{cases}$$

1. _____

2. _____

3. _____

4. _____

3)
$$\begin{cases} y = -0.6x + 7 \\ y = -0.4x + 8 \end{cases}$$

4)
$$\begin{cases} y = 0.75x + 5 \\ y = 3.5x - 6 \end{cases}$$

5. _____

6. _____

7. _____

8. _____

5)
$$\begin{cases} y = -0.1x + 2 \\ y = -0.3x + 0 \end{cases}$$

6)
$$\begin{cases} y = -2.5x - 8 \\ y = -0.75x - 1 \end{cases}$$

9. _____

10. _____

7)
$$\begin{cases} y = -1.3x + 4 \\ y = -1.5x + 6 \end{cases}$$

8)
$$\begin{cases} y = 0.2x - 2 \\ y = -0.4x + 1 \end{cases}$$

9)
$$\begin{cases} y = 0.4x + 5 \\ y = 0.9x + 0 \end{cases}$$

10)
$$\begin{cases} y = 3.5x + 4 \\ y = 1.5x + 0 \end{cases}$$



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

Answers

$$1) \begin{cases} y = 1.5x - 8 \\ y = -0.1x + 8 \end{cases}$$

$$1.5x - 8 = -0.1x + 8$$

$$1.6x = 16$$

$$1x = 10$$

$$y = (1.5 \times 10) - 8$$

$$y = (-0.1 \times 10) + 8$$

$$2) \begin{cases} y = -1.3x - 6 \\ y = -0.1x + 6 \end{cases}$$

$$-1.3x - 6 = -0.1x + 6$$

$$-1.2x = 12$$

$$1x = -10$$

$$y = (-1.3 \times -10) - 6$$

$$y = (-0.1 \times -10) + 6$$

$$3) \begin{cases} y = -0.6x + 7 \\ y = -0.4x + 8 \end{cases}$$

$$-0.6x + 7 = -0.4x + 8$$

$$-0.2x = 1$$

$$1x = -5$$

$$y = (-0.6 \times -5) + 7$$

$$y = (-0.4 \times -5) + 8$$

$$4) \begin{cases} y = 0.75x + 5 \\ y = 3.5x - 6 \end{cases}$$

$$0.75x + 5 = 3.5x - 6$$

$$-2.75x = -11$$

$$1x = 4$$

$$y = (0.75 \times 4) + 5$$

$$y = (3.5 \times 4) - 6$$

$$5) \begin{cases} y = -0.1x + 2 \\ y = -0.3x + 0 \end{cases}$$

$$-0.1x + 2 = -0.3x + 0$$

$$0.2x = -2$$

$$1x = -10$$

$$y = (-0.1 \times -10) + 2$$

$$y = (-0.3 \times -10) + 0$$

$$6) \begin{cases} y = -2.5x - 8 \\ y = -0.75x - 1 \end{cases}$$

$$-2.5x - 8 = -0.75x - 1$$

$$-1.75x = 7$$

$$1x = -4$$

$$y = (-2.5 \times -4) - 8$$

$$y = (-0.75 \times -4) - 1$$

$$7) \begin{cases} y = -1.3x + 4 \\ y = -1.5x + 6 \end{cases}$$

$$-1.3x + 4 = -1.5x + 6$$

$$0.2x = 2$$

$$1x = 10$$

$$y = (-1.3 \times 10) + 4$$

$$y = (-1.5 \times 10) + 6$$

$$8) \begin{cases} y = 0.2x - 2 \\ y = -0.4x + 1 \end{cases}$$

$$0.2x - 2 = -0.4x + 1$$

$$0.6x = 3$$

$$1x = 5$$

$$y = (0.2 \times 5) - 2$$

$$y = (-0.4 \times 5) + 1$$

$$9) \begin{cases} y = 0.4x + 5 \\ y = 0.9x + 0 \end{cases}$$

$$0.4x + 5 = 0.9x + 0$$

$$-0.5x = -5$$

$$1x = 10$$

$$y = (0.4 \times 10) + 5$$

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

$$10) \begin{cases} y = 3.5x + 4 \\ y = 1.5x + 0 \end{cases}$$

$$3.5x + 4 = 1.5x + 0$$

$$2x = -4$$

$$1x = -2$$

$$y = (3.5 \times -2) + 4$$

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

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



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)**