



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)**