



Identifizieren von Schnittpunkten mit Gleichungen Name:

Bestimmen Sie für jedes Gleichungssystem den Schnittpunkt in einem Graphen.

Antworten

1)
$$\begin{cases} y = -1.75x - 2 \\ y = 0.25x + 6 \end{cases}$$

2)
$$\begin{cases} y = -0.75x + 3 \\ y = -1.5x - 3 \end{cases}$$

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

3)
$$\begin{cases} y = 0.2x - 7 \\ y = -0.4x - 1 \end{cases}$$

4)
$$\begin{cases} y = 1.5x - 1 \\ y = -0.5x - 9 \end{cases}$$

5)
$$\begin{cases} y = -0.25x + 9 \\ y = -0.5x + 8 \end{cases}$$

6)
$$\begin{cases} y = 3.5x + 0 \\ y = 7.5x + 8 \end{cases}$$

7)
$$\begin{cases} y = -0.1x + 2 \\ y = 0.4x + 7 \end{cases}$$

8)
$$\begin{cases} y = -2.25x - 3 \\ y = -1.5x + 0 \end{cases}$$

9)
$$\begin{cases} y = -0.6x + 7 \\ y = -0.1x + 2 \end{cases}$$

10)
$$\begin{cases} y = -0.75x - 9 \\ y = 1.5x + 9 \end{cases}$$



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Antworten

1)
$$\begin{cases} y = -1.75x - 2 \\ y = 0.25x + 6 \end{cases}$$

$$-1.75x - 2 = 0.25x + 6$$

$$-2x = 8$$

$$1x = -4$$

$$y = (-1.75 \times -4) - 2$$

$$y = (0.25 \times -4) + 6$$

2)
$$\begin{cases} y = -0.75x + 3 \\ y = -1.5x - 3 \end{cases}$$

$$-0.75x + 3 = -1.5x - 3$$

$$0.75x = -6$$

$$1x = -8$$

$$y = (-0.75 \times -8) + 3$$

$$y = (-1.5 \times -8) - 3$$

3)
$$\begin{cases} y = 0.2x - 7 \\ y = -0.4x - 1 \end{cases}$$

$$0.2x - 7 = -0.4x - 1$$

$$0.6x = 6$$

$$1x = 10$$

$$y = (0.2 \times 10) - 7$$

$$y = (-0.4 \times 10) - 1$$

4)
$$\begin{cases} y = 1.5x - 1 \\ y = -0.5x - 9 \end{cases}$$

$$1.5x - 1 = -0.5x - 9$$

$$2x = -8$$

$$1x = -4$$

$$y = (1.5 \times -4) - 1$$

$$y = (-0.5 \times -4) - 9$$

5)
$$\begin{cases} y = -0.25x + 9 \\ y = -0.5x + 8 \end{cases}$$

$$-0.25x + 9 = -0.5x + 8$$

$$0.25x = -1$$

$$1x = -4$$

$$y = (-0.25 \times -4) + 9$$

$$y = (-0.5 \times -4) + 8$$

6)
$$\begin{cases} y = 3.5x + 0 \\ y = 7.5x + 8 \end{cases}$$

$$3.5x + 0 = 7.5x + 8$$

$$-4x = 8$$

$$1x = -2$$

$$y = (3.5 \times -2) + 0$$

$$y = (7.5 \times -2) + 8$$

7)
$$\begin{cases} y = -0.1x + 2 \\ y = 0.4x + 7 \end{cases}$$

$$-0.1x + 2 = 0.4x + 7$$

$$-0.5x = 5$$

$$1x = -10$$

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

$$y = (0.4 \times -10) + 7$$

8)
$$\begin{cases} y = -2.25x - 3 \\ y = -1.5x + 0 \end{cases}$$

$$-2.25x - 3 = -1.5x + 0$$

$$-0.75x = 3$$

$$1x = -4$$

$$y = (-2.25 \times -4) - 3$$

$$y = (-1.5 \times -4) + 0$$

9)
$$\begin{cases} y = -0.6x + 7 \\ y = -0.1x + 2 \end{cases}$$

$$-0.6x + 7 = -0.1x + 2$$

$$-0.5x = -5$$

$$1x = 10$$

$$y = (-0.6 \times 10) + 7$$

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

10)
$$\begin{cases} y = -0.75x - 9 \\ y = 1.5x + 9 \end{cases}$$

$$-0.75x - 9 = 1.5x + 9$$

$$-2.25x = 18$$

$$1x = -8$$

$$y = (-0.75 \times -8) - 9$$

$$y = (1.5 \times -8) + 9$$

1. (-4, 5)

2. (-8, 9)

3. (10, -5)

4. (-4, -7)

5. (-4, 10)

6. (-2, -7)

7. (-10, 3)

8. (-4, 6)

9. (10, 1)

10. (-8, -3)