Identifizieren von Schnittpunkten mit Gleichungen

Name:

Bestimmen Sie für jedes Gleichungssystem den Schnittpunkt in einem Graphen.

1) $\begin{cases} y = -1.25x - 4 \\ y = -2.25x - 8 \end{cases}$

2) $\begin{cases} y = -1.25x - 5 \\ y = -0.25x - 1 \end{cases}$

3) $\begin{cases} y = 1.5x + 2 \\ y = 0.5x + 4 \end{cases}$

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

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

6) $\begin{cases} y = -5.5x + 8 \\ y = 0.5x - 4 \end{cases}$

7) $\begin{cases} y = 0.4x - 5 \\ y = 0.5x - 6 \end{cases}$

8) $\begin{cases} y = 0.6x + 4 \\ y = 0.9x + 1 \end{cases}$

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

10) $\begin{cases} y = -0.4x + 9 \\ y = 0.3x + 2 \end{cases}$

Antworten

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

1-10	90	80	70	60	50	40	30	20	10	0

Identifizieren von Schnittpunkten mit Gleichungen Name: **Lösungsschlüssel**

Bestimmen Sie für jedes Gleichungssystem den Schnittpunkt in einem Graphen.

1) $\begin{cases} y = -1.25x - 4 \\ y = -2.25x - 8 \end{cases}$

$-1.25x - 4 = -2.25x - 8$
$1x = -4$
$1x = -4$
$y = (-1.25 \times -4) - 4$
$y = (-2.25 \times -4) - 8$

2) $\begin{cases} y = -1.25x - 5 \\ y = -0.25x - 1 \end{cases}$

$-1.25x - 5 = -0.25x - 1$
$-1x = 4$
$1x = -4$
$y = (-1.25 \times -4) - 5$
$y = (-0.25 \times -4) - 1$

3) $\begin{cases} y = 1.5x + 2 \\ y = 0.5x + 4 \end{cases}$

$1.5x + 2 = 0.5x + 4$
$1x = 2$
$1x = 2$
$y = (1.5 \times 2) + 2$
$y = (0.5 \times 2) + 4$

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

$-0.5x - 1 = 0.5x - 9$
$-1x = -8$
$1x = 8$
$y = (-0.5 \times 8) - 1$
$y = (0.5 \times 8) - 9$

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

$-0.6x - 9 = 0.1x - 2$
$-0.7x = 7$
$1x = -10$
$y = (-0.6 \times -10) - 9$
$y = (0.1 \times -10) - 2$

6) $\begin{cases} y = -5.5x + 8 \\ y = 0.5x - 4 \end{cases}$

$-5.5x + 8 = 0.5x - 4$
$-6x = -12$
$1x = 2$
$y = (-5.5 \times 2) + 8$
$y = (0.5 \times 2) - 4$

7) $\begin{cases} y = 0.4x - 5 \\ y = 0.5x - 6 \end{cases}$

$0.4x - 5 = 0.5x - 6$
$-0.1x = -1$
$1x = 10$
$y = (0.4 \times 10) - 5$
$y = (0.5 \times 10) - 6$

8) $\begin{cases} y = 0.6x + 4 \\ y = 0.9x + 1 \end{cases}$

$0.6x + 4 = 0.9x + 1$
$-0.3x = -3$
$1x = 10$
$y = (0.6 \times 10) + 4$
$y = (0.9 \times 10) + 1$

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

$-0.6x - 3 = -0.2x + 1$
$-0.4x = 4$
$1x = -10$
$y = (-0.6 \times -10) - 3$
$y = (-0.2 \times -10) + 1$

10) $\begin{cases} y = -0.4x + 9 \\ y = 0.3x + 2 \end{cases}$

$-0.4x + 9 = 0.3x + 2$
$-0.7x = -7$
$1x = 10$
$y = (-0.4 \times 10) + 9$
$y = (0.3 \times 10) + 2$

Antworten

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

1-10	90	80	70	60	50	40	30	20	10	0