Slopes of Parallel & Perpendicular Lines · 1

Are the lines $y = \frac{2}{5}x + 2$ and $10x + 4y = 1$ parallel, perpendicular, or neither?

Slopes of Parallel & Perpendicular Lines · 2

Are the lines $y = -\frac{5}{3}x + 1$ and $y = -\frac{5}{3}x - 4$ parallel, perpendicular, or neither?

Slopes of Parallel & Perpendicular Lines · 3

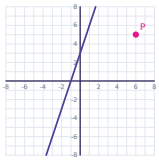
Are the lines $y = -\frac{1}{2}x$ and $y = -\frac{1}{2}x - 2$ parallel, perpendicular, or neither?

Slopes of Parallel & Perpendicular Lines · 4

Are the lines $y = -\frac{4}{5}x$ and $4x + 5y = 12$ parallel, perpendicular, or neither?

Slopes of Parallel & Perpendicular Lines · 5

Write an equation of the line through P(6, 5) that is perpendicular to $y = 3x + 3$.




Slopes of Parallel & Perpendicular Lines · 6

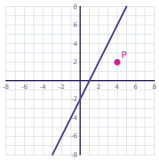
Are the lines $y = 4x - 2$ and $x + 4y = 0$ parallel, perpendicular, or neither?

Slopes of Parallel & Perpendicular Lines · 7

Are the lines $y = -\frac{1}{5}x - 5$ and $y = -5x + 5$ parallel, perpendicular, or neither?

Slopes of Parallel & Perpendicular Lines · 8

Write an equation of the line through P(4, 2) that is perpendicular to $y = 2x - 2$.



Slopes of Parallel & Perpendicular Lines · 2

**ANSWER**

**parallel**

Slopes of Parallel & Perpendicular Lines · 1

**ANSWER**

**perpendicular**

Slopes of Parallel & Perpendicular Lines · 4

**ANSWER**

**parallel**

Slopes of Parallel & Perpendicular Lines · 3

**ANSWER**

**parallel**

Slopes of Parallel & Perpendicular Lines · 6

**ANSWER**

**perpendicular**

Slopes of Parallel & Perpendicular Lines · 5

**ANSWER**

$$y = -3x + 7$$

Slopes of Parallel & Perpendicular Lines · 8

**ANSWER**

$$y = -2x + 4$$

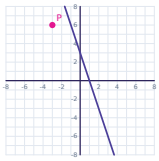
Slopes of Parallel & Perpendicular Lines · 7

**ANSWER**

**neither**

Slopes of Parallel & Perpendicular Lines · 9

Write an equation of the line through P(-3, 6) that is perpendicular to y = -3x + 3.

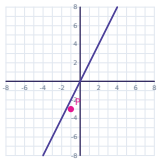



Slopes of Parallel & Perpendicular Lines · 10

Are the lines $y = -\frac{1}{4}x + 4$ and $y = -\frac{1}{2}x - 3$ parallel, perpendicular, or neither?

Slopes of Parallel & Perpendicular Lines · 11

Write an equation of the line through P(-1, -3) that is parallel to y = 2x.

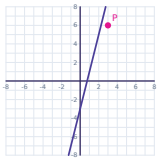


Slopes of Parallel & Perpendicular Lines · 12

Are the lines $y = \frac{5}{4}x - 3$ and $y = -\frac{5}{4}x + 5$ parallel, perpendicular, or neither?

Slopes of Parallel & Perpendicular Lines · 13

Write an equation of the line through P(3, 6) that is parallel to y = 4x - 3.




Slopes of Parallel & Perpendicular Lines · 14

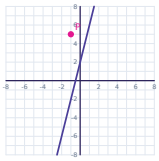
Are the lines $y = \frac{3}{5}x - 5$ and $y = -\frac{5}{3}x$ parallel, perpendicular, or neither?

Slopes of Parallel & Perpendicular Lines · 15

Are the lines $y = -\frac{4}{5}x - 6$ and $y = \frac{5}{4}x - 4$ parallel, perpendicular, or neither?

Slopes of Parallel & Perpendicular Lines · 16

Write an equation of the line through P(-1, 5) that is parallel to y = 4x + 2.



Slopes of Parallel & Perpendicular Lines · 10

**ANSWER**

**neither**

Slopes of Parallel & Perpendicular Lines · 9

**ANSWER**

$$y = \frac{1}{3}x + 7$$

Slopes of Parallel & Perpendicular Lines · 12

**ANSWER**

**neither**

Slopes of Parallel & Perpendicular Lines · 11

**ANSWER**

$$y = 2x - 1$$

Slopes of Parallel & Perpendicular Lines · 14

**ANSWER**

**perpendicular**

Slopes of Parallel & Perpendicular Lines · 13

**ANSWER**

$$y = 4x - 6$$

Slopes of Parallel & Perpendicular Lines · 16

**ANSWER**

$$y = 4x + 9$$

Slopes of Parallel & Perpendicular Lines · 15

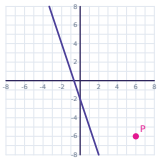
**ANSWER**

**perpendicular**

Are the lines $y = -4x + 2$ and $y = \frac{1}{4}x + 3$ parallel, perpendicular, or neither?



Write an equation of the line through P(6, -6) that is perpendicular to $y = -3x - 2$.

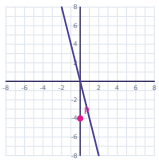





Are the lines $y = 3x - 5$ and $6x - 2y = -11$ parallel, perpendicular, or neither?



Write an equation of the line through P(0, -4) that is perpendicular to $y = -4x$.

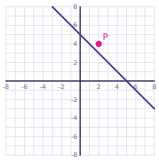





Are the lines $y = -\frac{1}{5}x - 1$ and $y = -\frac{1}{5}x - 6$ parallel, perpendicular, or neither?

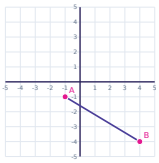


Write an equation of the line through P(2, 4) that is perpendicular to $y = -x + 5$.



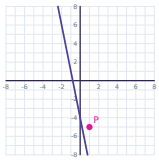



Line $\ell$ passes through A(-1, -1) and B(4, -4). Find the slope of a line parallel to $\ell$.






Write an equation of the line through P(1, -5) that is parallel to $y = -5x - 4$.



Slopes of Parallel & Perpendicular Lines · 18

**ANSWER**

$$y = \frac{1}{3}x - 8$$

Slopes of Parallel & Perpendicular Lines · 17

**ANSWER**

**perpendicular**

Slopes of Parallel & Perpendicular Lines · 20

**ANSWER**

$$y = \frac{1}{4}x - 4$$

Slopes of Parallel & Perpendicular Lines · 19

**ANSWER**

**parallel**

Slopes of Parallel & Perpendicular Lines · 22

**ANSWER**

$$y = x + 2$$

Slopes of Parallel & Perpendicular Lines · 21

**ANSWER**

**parallel**

Slopes of Parallel & Perpendicular Lines · 24

**ANSWER**

$$y = -5x$$

Slopes of Parallel & Perpendicular Lines · 23

**ANSWER**

$$\frac{3}{-5}$$