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

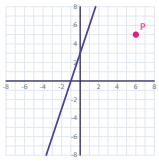
Are the lines $y = -\frac{1}{2}x$ and $y = -\frac{1}{2}x - 2$ parallel, perpendicular, or neither?

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

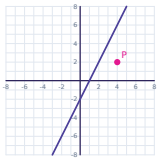
Are the lines $y = 4x - 2$ and $x + 4y = 0$ parallel, perpendicular, or neither?

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

$$y = -2x + 4$$

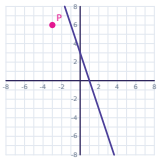
Slopes of Parallel & Perpendicular Lines · 7

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.

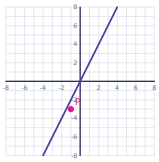


Slopes of Parallel & Perpendicular Lines · 10

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.

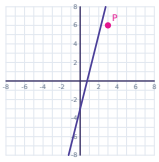


Slopes of Parallel & Perpendicular Lines · 12

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

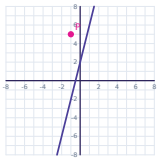
Are the lines $y = \frac{3}{5}x - 5$ and $y = -\frac{5}{3}x$ parallel, perpendicular, or neither?

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

$$y = 4x + 9$$

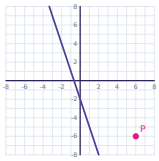
Slopes of Parallel & Perpendicular Lines · 15

ANSWER

perpendicular

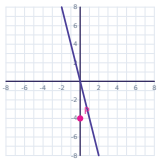
Are the lines $y = -4x + 2$ and $y = \frac{1}{4}x + 3$ parallel, perpendicular, or neither?

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



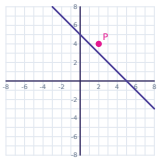
Are the lines $y = 3x - 5$ and $6x - 2y = -11$ parallel, perpendicular, or neither?

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

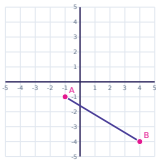


Are the lines $y = -\frac{1}{5}x - 1$ and $y = -\frac{1}{5}x - 6$ parallel, perpendicular, or neither?

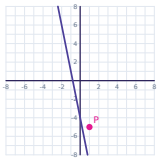
Write an equation of the line through P(2, 4) that is perpendicular to $y = -x + 5$.



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



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

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