Task card 1 Slopes of Parallel & Perpendicular...

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

Task card 2 Slopes of Parallel & Perpendicular...

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

Task card 3 Slopes of Parallel & Perpendicular...

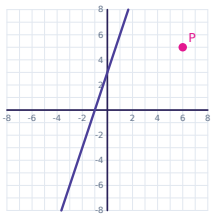
Are the lines $y = -\frac{1}{2}x$ and $y = -\frac{1}{2}x - 2$ parallel, perpendicular, or neither?

Task card 4 Slopes of Parallel & Perpendicular...

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

Task card 5 Slopes of Parallel & Perpendicular...

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



Task card 6 Slopes of Parallel & Perpendicular...

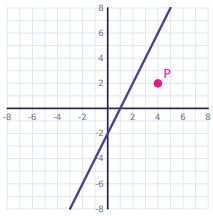
Are the lines $y = 4x - 2$ and $x + 4y = 0$ parallel, perpendicular, or neither?

Task card 7 Slopes of Parallel & Perpendicular...

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

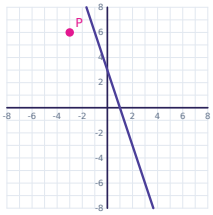
Task card 8 Slopes of Parallel & Perpendicular...

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



Task card 9 Slopes of Parallel & Perpendicular...

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

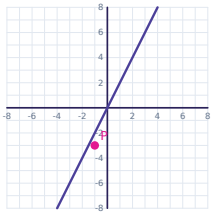


Task card 10 Slopes of Parallel & Perpendicular...

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

Task card 11 Slopes of Parallel & Perpendicular...

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

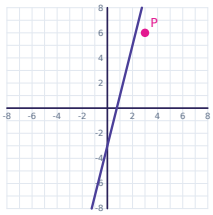


Task card 12 Slopes of Parallel & Perpendicular...

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

Task card 13 Slopes of Parallel & Perpendicular...

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



Task card 14 Slopes of Parallel & Perpendicular...

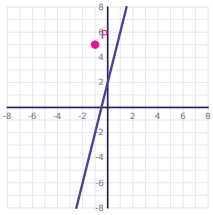
Are the lines $y = \frac{3}{5}x - 5$ and $y = -\frac{5}{3}x$ parallel, perpendicular, or neither?

Task card 15 Slopes of Parallel & Perpendicular...

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

Task card 16 Slopes of Parallel & Perpendicular...

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

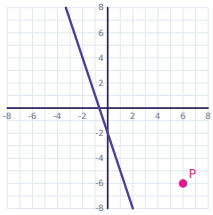


Task card 17 Slopes of Parallel & Perpendicular...

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

Task card 18 Slopes of Parallel & Perpendicular...

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

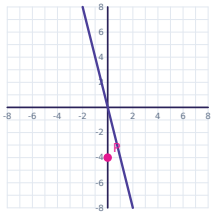


Task card 19 Slopes of Parallel & Perpendicular...

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

Task card 20 Slopes of Parallel & Perpendicular...

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

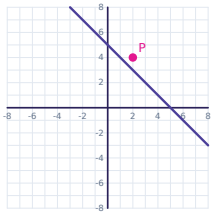


Task card 21 Slopes of Parallel & Perpendicular...

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

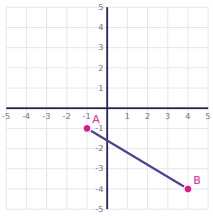
Task card 22 Slopes of Parallel & Perpendicular...

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



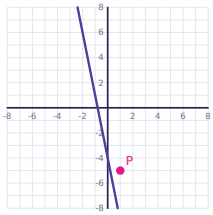
Task card 23 Slopes of Parallel & Perpendicular...

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



Task card 24 Slopes of Parallel & Perpendicular...

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



Slopes of Parallel & Perpendicular Lines Task Cards

Recording sheet · Grade 10 · Write slopes as integers or fractions in simplest form. Write equations in slope-intercept form, y = mx + b.

Scan to check your answers

Name: _____ Date: _____

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Slopes of Parallel & Perpendicular Lines Task Cards: Answer Key

Grade 10 · Hard

The answers online

1. perpendicular	**2.** parallel	**3.** parallel
4. parallel	**5.** $y = -\frac{1}{3}x + 7$	**6.** perpendicular
7. neither	**8.** $y = -\frac{1}{2}x + 4$	**9.** $y = \frac{1}{3}x + 7$
10. neither	**11.** y = 2x - 1	**12.** neither
13. y = 4x - 6	**14.** perpendicular	**15.** perpendicular
16. y = 4x + 9	**17.** perpendicular	**18.** $y = \frac{1}{3}x - 8$
19. parallel	**20.** $y = \frac{1}{4}x - 4$	**21.** parallel
22. y = x + 2	**23.** $-\frac{3}{5}$	**24.** y = -5x