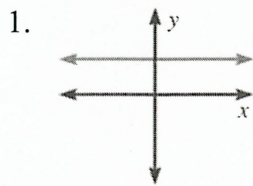
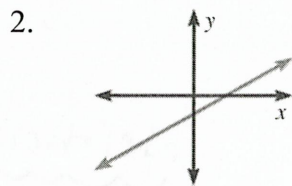


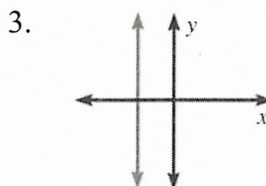
Describe the slopes of the given lines (*positive, negative, zero, no slope/undefined*)



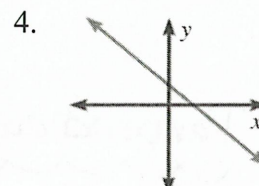
zero



positive



undefined



negative

Find the slope of the line that passes through the points. **Show your work.**

5. (3, 5) and (5, 6)

$m = \frac{1}{2}$

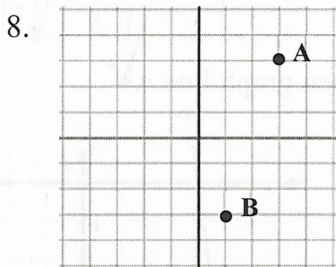
6. (-5, -1) and (3, -1)

$m = 0$

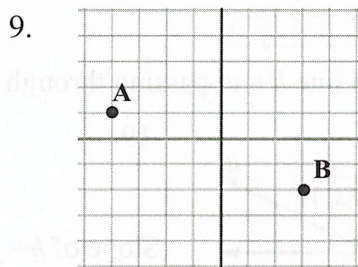
7. (2, 1) and (0, 6)

$m = -\frac{5}{2}$

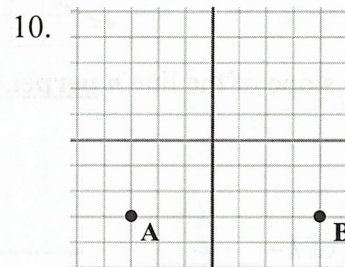
Find the slope of the line that passes through the points.



$m = 3$



$m = -\frac{3}{7}$

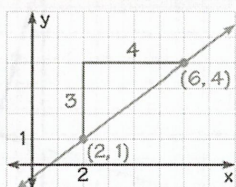


$m = 0$

11. What happens when you apply the slope formula to a horizontal line? What happens when you apply it to a vertical line?

Describe and correct the error in finding the slope of the line.

12. $m = \frac{4}{3}$



X

★ $m = \frac{\text{rise}}{\text{run}}$

13. Slope of the line through (2, 7) and (4, 5)

$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{7 - 5}{4 - 2} = \frac{2}{2} = 1$

X

Tell whether the lines through the given points are parallel, perpendicular or neither. **Justify your answer.**

14. Line 1: (1, 0) and (7, 4)
Line 2: (7, 0) and (3, 6)

Perpendicular

15. Line 1: (-3, 1) and (-7, -2)
Line 2: (2, -1) and (8, 4)

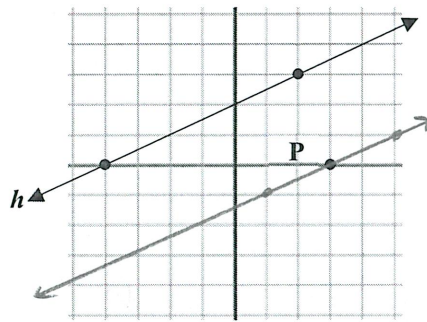
Neither

Find the slope of the line n **parallel** to line h and passing through point P . Then graph line n .

16.

Slope of $h = \frac{1}{2}$

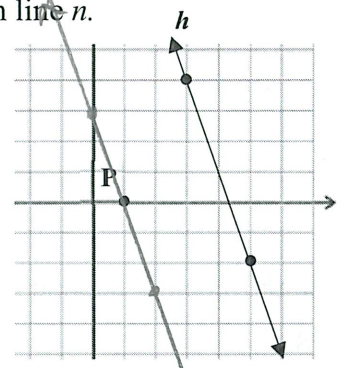
Slope of $n = \frac{1}{2}$



17.

Slope of $h = -3$

Slope of $n = -3$

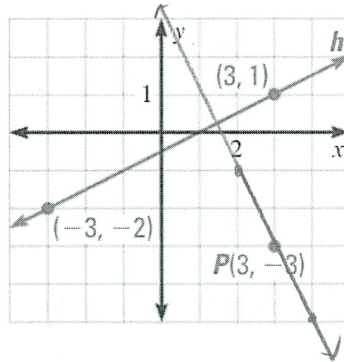


Find the slope of the line n **perpendicular** to line h and passing through point P . Then graph line n .

18.

Slope of $h = \frac{1}{2}$

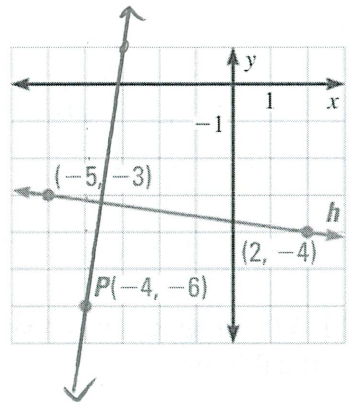
Slope of $n = -2$



19.

Slope of $h = -\frac{1}{7}$

Slope of $n = 7$

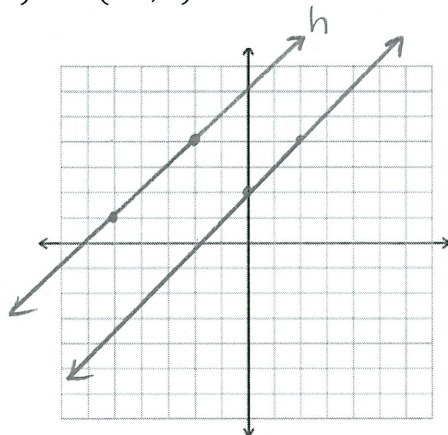


Graph a line with the given description. **Show your work when finding slope.**

20. Through (0, 2) and **parallel** to the line through (-2, 4) and (-5, 1)

21. Through (1, 3) and **perpendicular** to the line through (-1, -1) and (2, 0)

$m = 1$



$m = -3$

