OPE REVIEW

Remember that the slope of a line is a number that describes the steepness of the line. You can find the slope of a line when you have an equation in slope-intercept form:



$$y = mx + b$$
slope

You can also find the slope of a line by calculating the rise over the run, or the change in y over the change in x:

slope =
$$\frac{\text{rise}}{\text{run}} = \frac{y_2 - y_1}{x_2 - x_1}$$

Practice! Find the slope of each line represented by the equation.

$$y = \frac{2}{3}x + 7$$

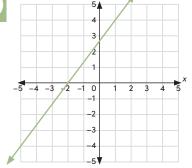
$$y = -5x + 9$$

3
$$y = \frac{3}{5}x - 1$$

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

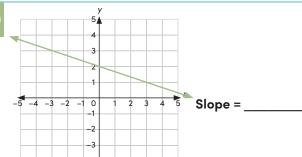
$$5 \qquad y = 6 + 8x$$

Try it! Find the slope of each line. Simplify your answer and write it as a proper fraction, improper fraction, or integer.

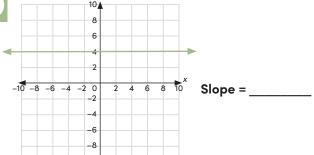


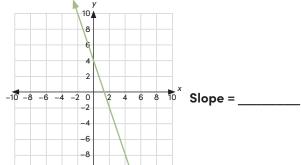


10



9





SLOPE REVIEW

Keep going! Find the slope of the line that passes through each set of points. Simplify your answer and write it as a proper fraction, improper fraction, or integer.

11

(2, 5) and (7, 8)

12

(4, 1) and (5, 3)

13

(1, 8) and (3, 8)

Slope = _____

Slope = _____

Slope = _____

14

(4, 5) and (2, -9)

15

(-5, 7) and (-1, 12)

16

6 (-1, 7) and (3, -5)

Slope = _____

Slope = _____

Slope = _____

17

(-4, 9) and (2, 1)

18

(-6, -3) and (-4, 2)

19

(-10, -4) and (-6, -8)

Slope = _____

Slope = _____

Slope = _____

Challenge! Follow the directions to write equations and draw lines with the given slopes.

20

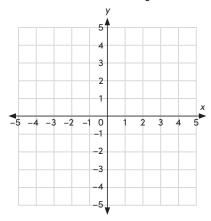
Write an equation with a slope of 4.

21

Write an equation with a slope of $-\frac{2}{5}$.

22

Draw a line with a slope of $\frac{2}{3}$.



23

Draw a line with a slope of –2.

