

Geometry

Unit: Lines and the Coordinate Plane

Section: Slope of a Line

Review Worksheet Key

1) Find the slope of a line through the points (-2, 5) and (3, -1).

$$m = -\frac{6}{5}$$

2) Find the slope of the line through the points (4, 50) and (-2, -100).

$$m = 25$$

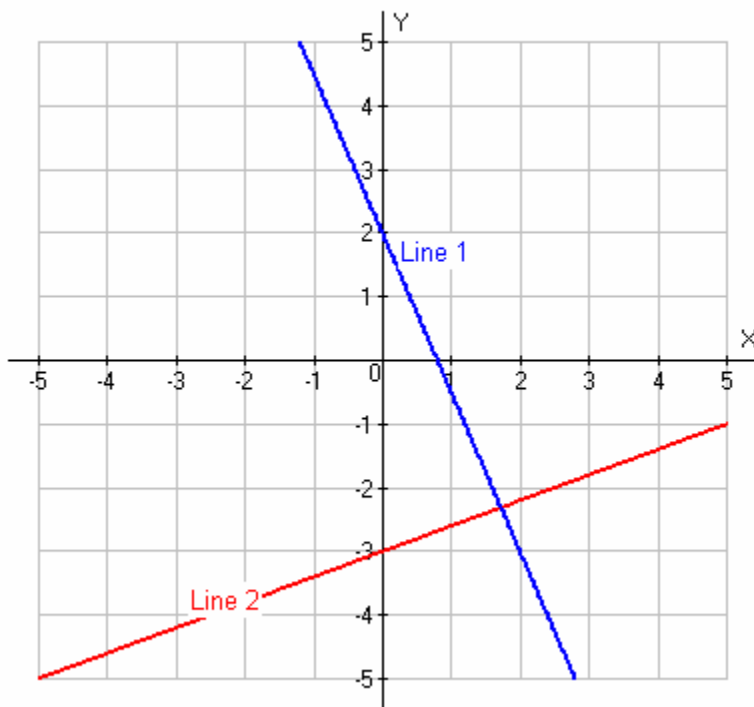
3) Find the value of y so that the slope of the line through the points (1, 1) and (7, y) equals $\frac{4}{3}$.

$$y = 9$$

4) Find the value of x so that the slope of the line through the points (x , -4) and (-2, 2) equals 1.

$$x = -8$$

5) Find the slope of each line below.



Line 1: $m = -\frac{5}{2}$

Line 2: $m = \frac{2}{5}$

6) Describe how you know if lines are parallel, perpendicular or neither. Give examples of each.

Lines that are parallel have the same slope. (If $m = 3$ in both lines, they are parallel)

Lines that are perpendicular have negative reciprocal slopes. (If $m = \frac{4}{5}$ in one line and $m = -\frac{5}{4}$ in another, then they are perpendicular.)

Lines that are neither do not have any relationship between their slopes.