Name _____ Class _____ Date _____

Reteaching 5-1

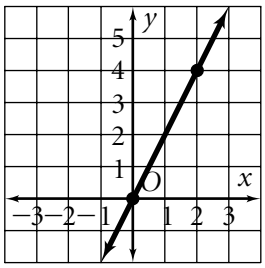
Rate of Change and Slope

OBJECTIVE: To find the slope of a line

MATERIALS: None

Example

Find the slope of the line shown in the graph.



a. Pick any two points on the line. Write their coordinates. Underline the x-coordinates and circle the y-coordinates. This example uses $(\underline{0},0)$, $(\underline{2},4)$.

b. The difference of y-coordinates shows the vertical change or *rise*. Find the rise of the line by subtracting the y-coordinates.
vertical change = rise = 4 − 0 = 4

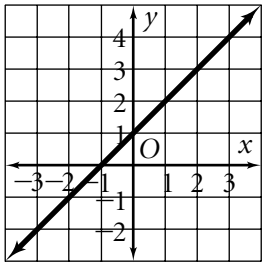
c. The difference of x-coordinates shows the horizontal change or *run*. Find the run of the line by subtracting the x-coordinates. Be sure to subtract the x-coordinates in the same order as the y-coordinates.
horizontal change = run = 2 − 0 = 2

d. Find the slope of the line through the two points by forming the ratio of rise to run.
slope $= \frac{\text{rise}}{\text{run}} = \frac{4}{2}$ or 2

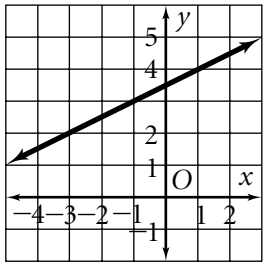
Exercises

Use steps a–d from the example to find the slope of each line.

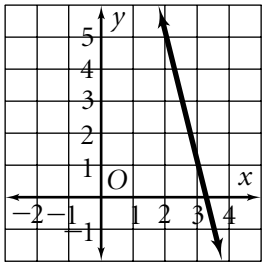
1.



2.

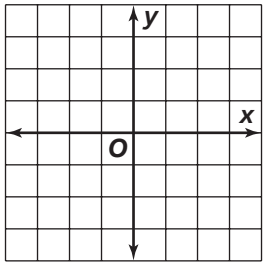


3.



4. Draw a horizontal line. Find the slope of the line.

5. Draw a vertical line. Find the slope of the line.



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