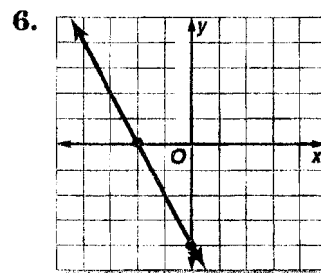
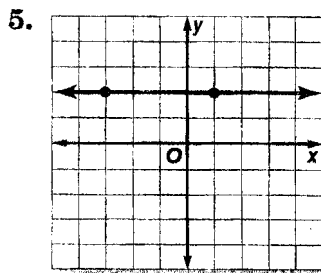
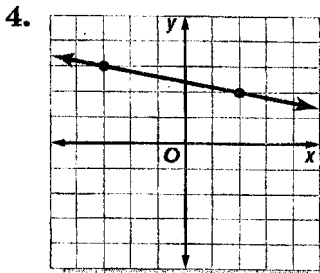
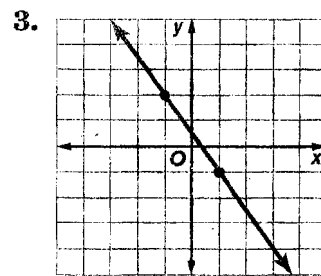
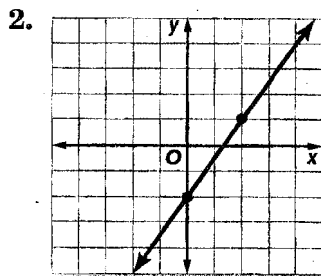
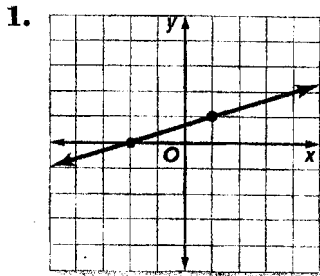


**4-3**

**Practice: Skills**

**Slope**

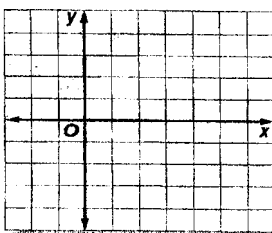
Find the slope of each line.



The points given in each table lie on a line. Find the slope of the line. Then graph the line.

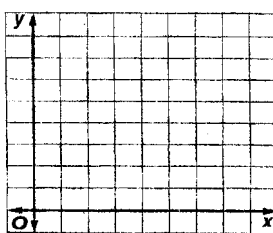
7. 

x	0	3	6	9
y	1	2	3	4



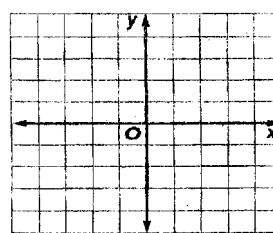
8. 

x	1	3	5	7
y	6	5	4	3



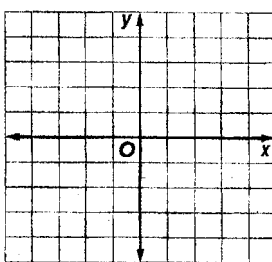
9. 

x	-2	-1	0	1
y	2	1	0	-1



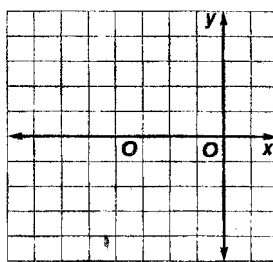
10. 

x	-4	-2	0	2
y	3	3	3	3



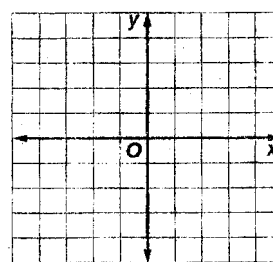
11. 

x	-7	-5	-3	-1
y	-6	-3	0	3



12. 

x	-8	-4	0	4
y	8	5	2	-1



**4-3**

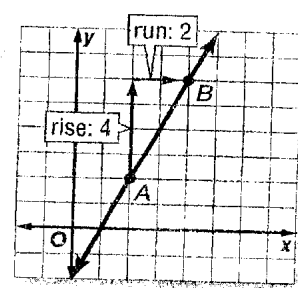
# Study Guide and Intervention

## Slope

The **slope** of a line is the ratio of the rise, or vertical change, to the run, or horizontal change.

**EXAMPLE 1** Find the slope of the line in the graph.

Choose two points on the line. The vertical change from point A to point B is 4 units while the horizontal change is 2 units.



$$\begin{aligned} \text{slope} &= \frac{\text{rise}}{\text{run}} && \text{Definition of slope} \\ &= \frac{4}{2} && \text{The rise is 4, and the run is 2.} \\ &= 2 && \text{Simplify.} \end{aligned}$$

The slope of the line is 2.

**EXAMPLE 2** The points in the table lie on a line. Find the slope of the line.

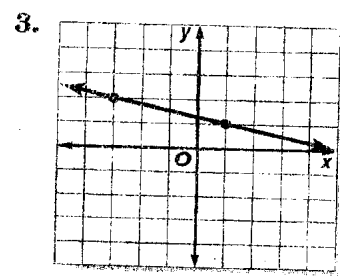
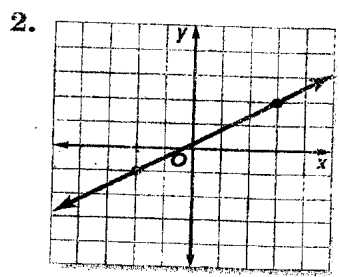
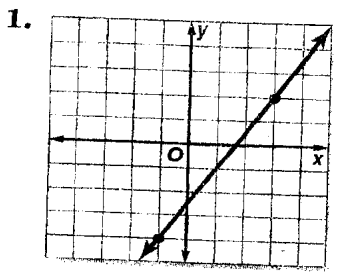
		+ 3	+ 3	+ 3	
		↷	↷	↷	
<i>x</i>	-2	1	4	7	
<i>y</i>	5	1	-3	-7	
		↘	↘	↘	
		-4	-4	-4	

$$\begin{aligned} \text{slope} &= \frac{\text{rise}}{\text{run}} \leftarrow \begin{matrix} \text{change in } y \\ \text{change in } x \end{matrix} \\ &= \frac{-4}{3} \text{ or } -\frac{4}{3} \end{aligned}$$

The slope of the line is  $-\frac{4}{3}$ .

### EXERCISES

Find the slope of each line.



The points given in each table lie on a line. Find the slope of the line.

4. 

<i>x</i>	3	5	7	9
<i>y</i>	-1	2	5	8

5. 

<i>x</i>	-5	0	5	10
<i>y</i>	4	3	2	1