

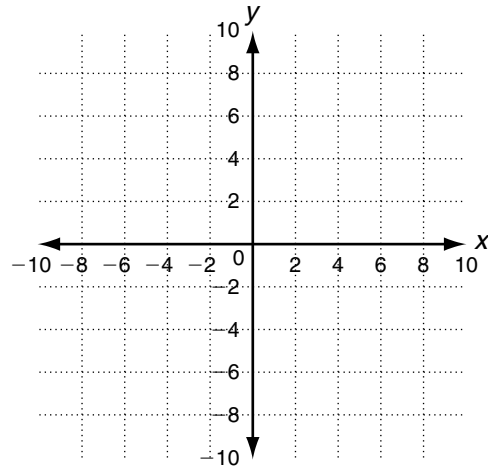
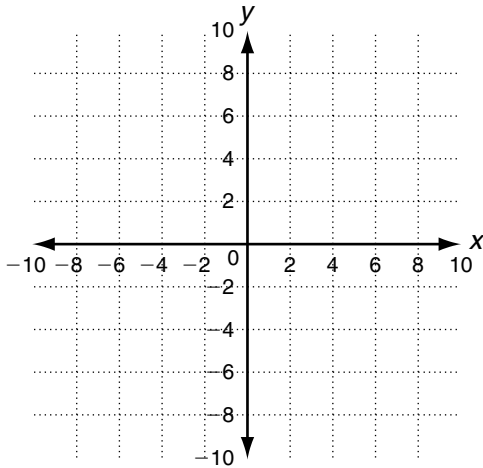
**LESSON**  
**8-1**

**Practice B**  
**Variation Functions**

Write and graph each function.

1.  $y$  varies directly as  $x$ , and  $y = 30$  when  $x = -6$ .

2.  $y$  varies inversely as  $x$ , and  $y = 5$  when  $x = 3$ .



Determine whether each data set represents a direction variation, an inverse variation, or neither.

3.

$x$	8	12	16
$y$	2	3	4

4.

$x$	3	1	0.5
$y$	5	15	30

Solve.

5. The number of chaperones,  $c$ , needed for the class trip varies directly as the number of students,  $s$ , going on the trip, and  $c = 7$  when  $s = 56$ . How many chaperones are needed if 104 students go on the class trip?

6. The owner of a bookstore developed a model for determining the price of rare comic books. The price,  $P$ , of each book should vary directly with the number of people,  $N$ , that have requested the book and inversely to the number of such books in existence,  $M$ . If  $N = 10$  people,  $M = 10,000$  copies and  $P = \$5$ , then find  $P$  for  $N = 200$  people and  $M = 100$  copies.