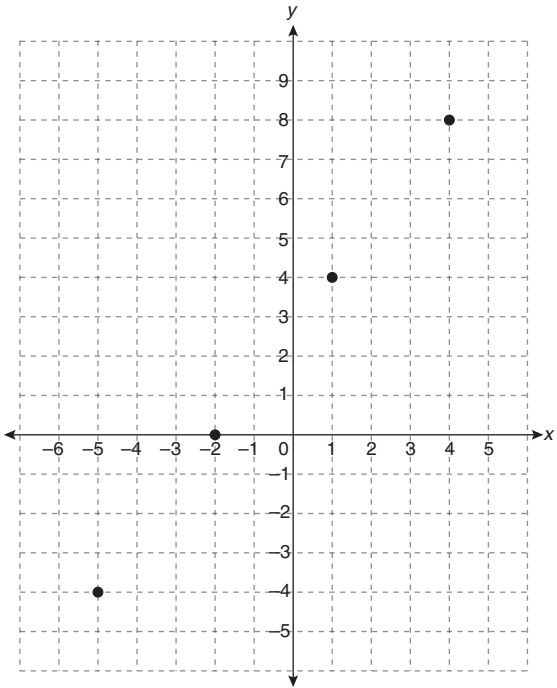## Check Up

1. a. Complete the table of values for the relation represented by the graph.

x						
y						

b. Extrapolate the next two sets of values in the table.

c. Describe the patterns you see in the graph.

d. Complete the sentence.

To move from one point on the graph to the next, _____.

2. Given the following table of values, determine the missing y-values, assuming the relation is linear.

x	−6	−3	0	3	6	9
y		2	5	8		

3. Shayla sells scarves and earns $50.00 for every 4 scarves she sells.

a. Complete the table.

# of Scarves	0	4	8	12	16	20
Earnings ($)	0					

b. Does this scenario represent a linear relation? Explain.

c. How much does Shayla earn for selling 36 scarves?

✓ Compare your answers.

1. a. Complete the table of values for the relation represented by the graph.

x	−5	−2	1	4	7	10
y	−4	0	4	8	12	16

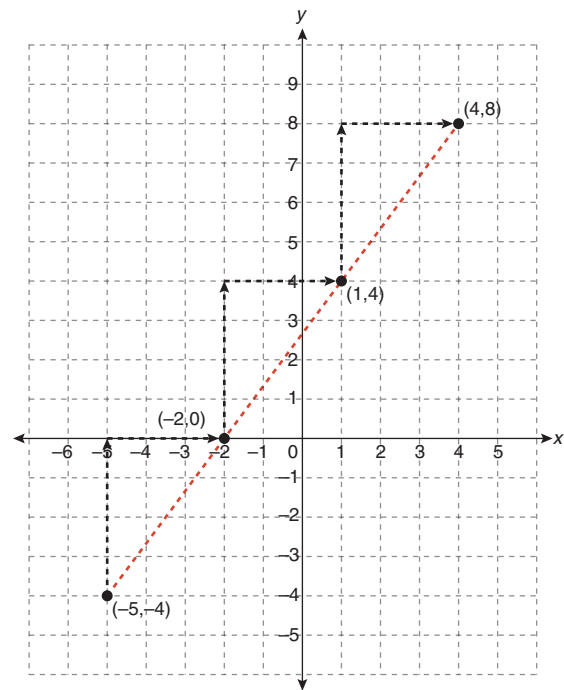b. Extrapolate the next two sets of values in the table.

$x = 4 + 3$ and $y = 8 + 4$; (7,12)

$x = 7 + 3$ and $y = 12 + 4$; (10,16)

c. Describe the patterns you see in the graph.

All points can be connected by a straight line.

Adjacent x-values have a common difference of 3.

Adjacent y-values have a common difference of 4.

d. Complete the sentence.

To move from one point on the graph to the next, move 4 units up and 3 units to the right.

2. Given the following table of values, determine the missing y-values, assuming the relation is linear.

   Each increase of 3 between adjacent x-values corresponds to an increase of 3 in adjacent y-values.

x	−6	−3	0	3	6	9
y	−1	2	5	8	11	14

3. Shayla sells scarves and earns $50.00 for every 4 scarves she sells.

   a. Complete the table.

# of Scarves	0	4	8	12	16	20
Earnings ($)	0	50	100	150	200	250

   b. Does this scenario represent a linear relation? Explain.

   This is a linear relation. For every increase of 4 scarves, there is an increase in earnings of $50.

Difference between # of scarves	Difference in Earnings
$8 - 4 = 4$	$100 - 50 = 50$
$12 - 8 = 4$	$150 - 100 = 50$
$16 - 12 = 4$	$200 - 150 = 50$
$20 - 16 = 4$	$250 - 200 = 50$

   c. How much does Shayla earn for selling 36 scarves?

   The table can be extended to determine this value.

# of Scarves	0	4	8	12	16	20	24	28	32	36
Earnings ($)	0	50	100	150	200	250	300	350	400	450

   Shayla earns $450.00 for selling 36 scarves.