

**Algebra**  
**Chapter 5 Review**

Name \_\_\_\_\_

**Plot each point on the coordinate graph. Label the point with the appropriate letter.**

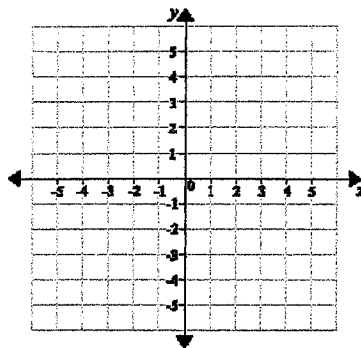
*Name the quadrant or axis on which each point is located.*

1. A (2, -3)

2. B (-4, 0)

3. C (0, -1)

4. D (-2, 3)



**Evaluate the following functions for each value of x.**

5.  $f(x) = 6x + 12$  for  $x = 2$ .

6.  $f(x) = x - 5$  for  $x = 8$ .

7.  $f(x) = -4(x - 2)$  for  $x = 15$

8.  $g(x) = x^2 - 3$  for  $x = -1$ .

**For 9-12, state the Domain and Range of each relation. Then, determine if it is a function or not.**

9.

x	y
6	-3
0	-3
8	4
0	-2

10.  $\{(6, 4), (6, 3), (6, 1), (6, 10)\}$

Domain \_\_\_\_\_

Domain \_\_\_\_\_

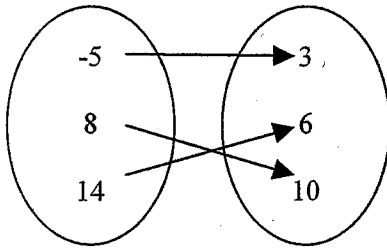
Range \_\_\_\_\_

Range \_\_\_\_\_

Function? \_\_\_\_\_

Function? \_\_\_\_\_

11.

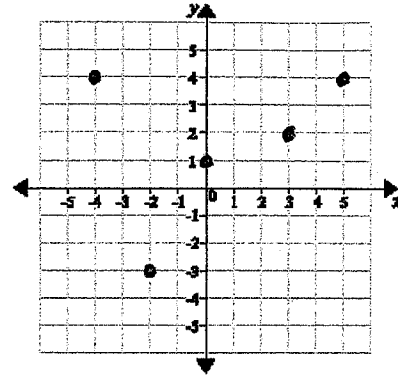


Domain \_\_\_\_\_

Range \_\_\_\_\_

Function? \_\_\_\_\_

12.



Domain \_\_\_\_\_

Range \_\_\_\_\_

Function? \_\_\_\_\_

**Write a function rule for each table of values below.**

13.

x	y
2	12
3	18
4	24
5	30

\_\_\_\_\_

14.

x	y
-3	5
-4	4
-5	3
-6	2

\_\_\_\_\_

15.

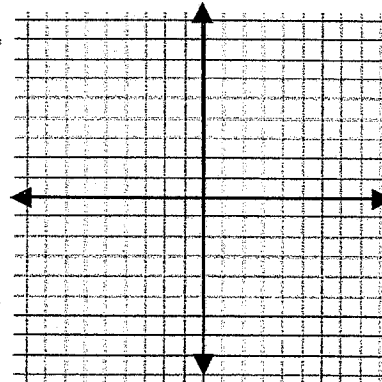
x	y
4	18
6	38
8	66
10	102

\_\_\_\_\_

**Make a table of values for each equation below. Graph the values.**

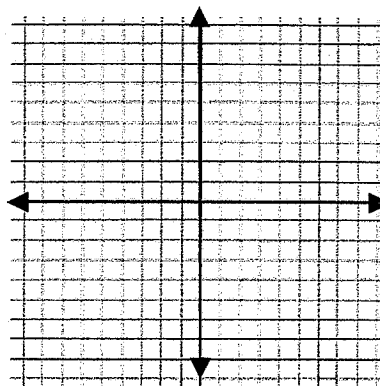
16.  $y = x - 3$

shape \_\_\_\_\_



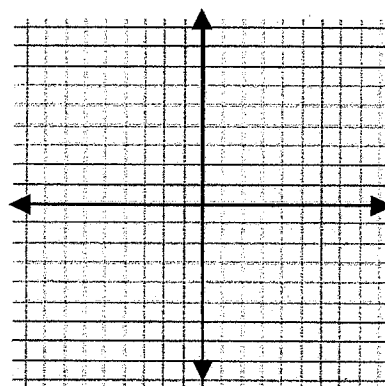
17.  $y = 2x + 1$

shape \_\_\_\_\_



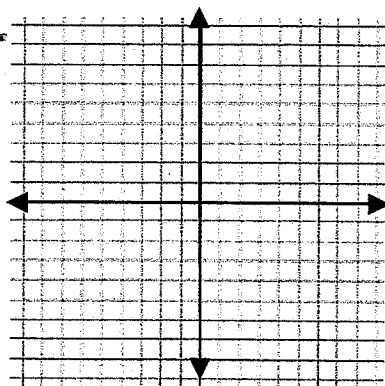
18.  $y = x^2$

shape \_\_\_\_\_



19.  $y = |x| + 4$

shape \_\_\_\_\_



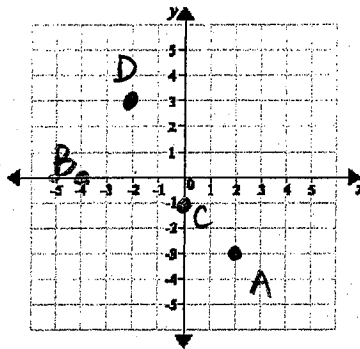
Algebra  
Chapter 5 Review

Name Key

Plot each point on the coordinate graph. Label the point with the appropriate letter.

Name the quadrant or axis on which each point is located.

1. A (2, -3) quadrant IV
2. B (-4, 0) x-axis
3. C (0, -1) y-axis
4. D (-2, 3) quadrant II



Evaluate the following functions for each value of x.

5.  $f(x) = 6x + 12$  for  $x = 2$ .

$$f(2) = 6(2) + 12$$

$$f(2) = 12 + 12$$

$$f(2) = 24$$

6.  $f(x) = x - 5$  for  $x = 8$ .

$$f(8) = 8 - 5$$

$$f(8) = 3$$

7.  $f(x) = -4(x - 2)$  for  $x = 15$

$$f(15) = -4(15 - 2)$$

$$f(15) = -4(13)$$

$$f(15) = -52$$

8.  $g(x) = x^2 - 3$  for  $x = -1$ .

$$g(-1) = (-1)^2 - 3$$

$$g(-1) = 1 - 3$$

$$g(-1) = -2$$

For 9-12, state the Domain and Range of each relation. Then, determine if it is a function or not.

9.

x	y
6	-3
0	-3
8	4
0	-2

Domain  $d = \{0, 6, 8\}$

Range  $r = \{-3, -2, 4\}$

Function? no, 0 repeats

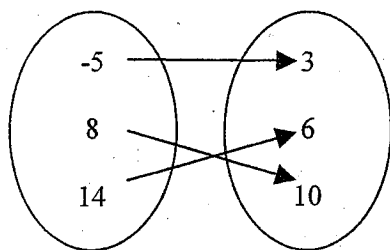
10.  $\{(6, 4), (6, 3), (6, 1), (6, 10)\}$

Domain  $d = \{6\}$

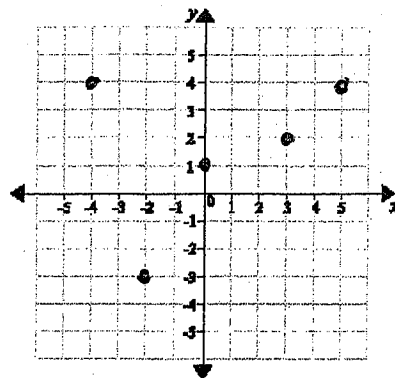
Range  $r = \{1, 3, 4, 10\}$

Function? no, 6 repeats

11.

Domain  $d = \{-5, 8, 14\}$ Range  $r = \{3, 6, 10\}$ Function? yes, no x values repeat

12.

Domain  $d = \{-4, -2, 0, 3, 5\}$ Range  $r = \{-3, 1, 2, 4\}$ Function? yes, no x values repeat

Write a function rule for each table of values below.

13.

x	y
2	12
3	18
4	24
5	30

$2 \cdot 6$   
 $3 \cdot 6$   
 $4 \cdot 6$   
 $5 \cdot 6$

$$y = 6x$$

14.

x	y
-3	5
-4	4
-5	3
-6	2

$-3 + 8$   
 $-4 + 8$   
 $-5 + 8$   
 $-6 + 8$

$$y = x + 8$$

15.

x	y
4	18
6	38
8	66
10	102

$4^2 + 2$   
 $6^2 + 2$   
 $8^2 + 2$   
 $10^2 + 2$

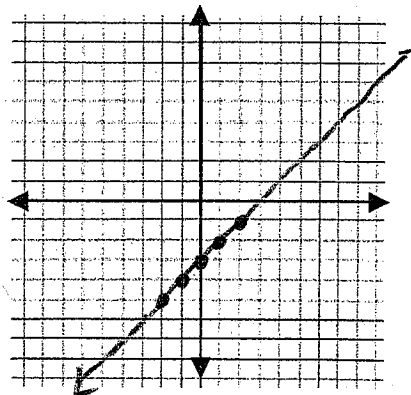
$$y = x^2 + 2$$

Make a table of values for each equation below. Graph the values.

16.  $y = x - 3$

line

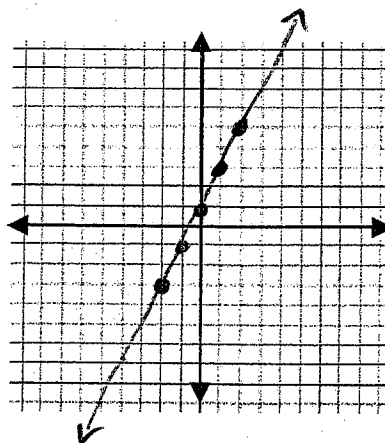
x	y
-2	-5
-1	-4
0	-3
1	-2
2	-1



17.  $y = 2x + 1$

-2	-3
-1	-1
0	1
1	3
2	5

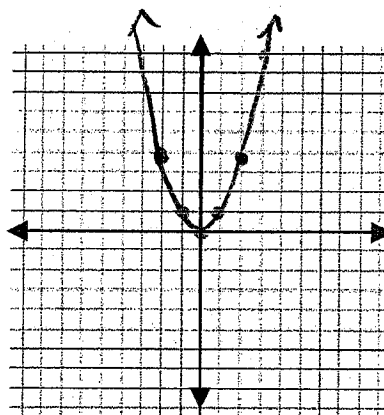
line



18.  $y = x^2$

-2	4
-1	1
0	0
1	1
2	4

u, parabola



19.  $y = |x| + 4$

-2	6
-1	5
0	4
1	5
2	6

V

