Test Review
Patterns on a Coordinate Plane

1. The table below shows how long it took Ms. Correll to run different distances.

number of miles	minutes
0	0
2	12
4	24
8	48
12	72

Which equation models the relationship between the minutes running, y, and the number of miles, x ?

A $y = 2x$
B $y = x + 6$
C $y = x + 10$
D $y = 6x$

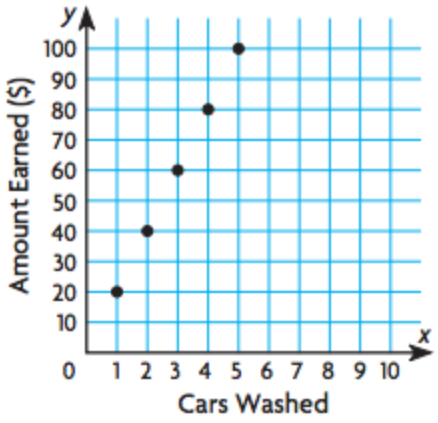
2. What is the rule for each of the patterns below? ex. y = ?

x	1	2	3	4	5
y	4	5	6	7	8

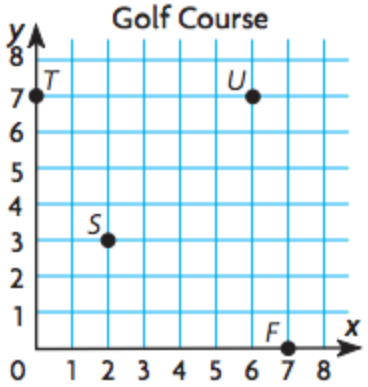
x	1	2	3	4	5
y	4	8	12	16	20

3. If you drew a straight line to connect the points on the graph below, which of the following points would NOT appear below the line segment?

A (3, 50) B (2, 50) C (5,60) D (2,20)



4. The graph shows four points. Which table shows the coordinates of points T, S, U, and F?



A

Points	X	Y
T	0	7
S	3	2
U	7	6
F	7	0

B

Points	X	Y
T	7	0
S	2	3
U	7	7
F	7	0

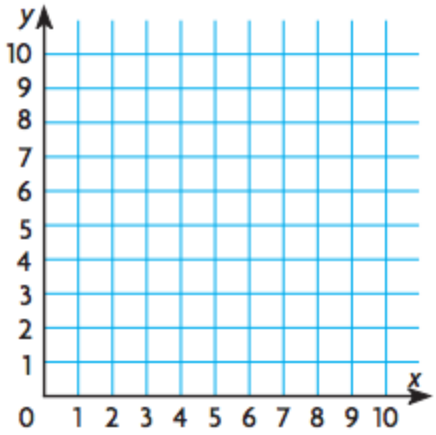
C

Points	X	Y
T	7	0
S	3	2
U	7	6
F	0	7

D

Points	X	Y
T	0	7
S	2	3
U	6	7
F	7	0

5. Plot the points (4,2), (2,4), (2,6), and (4,8). Plot two more points so that points (4,2) and (4,8) create a line of symmetry for the trapezoid?



6. Which of the following tables follows an addition rule and what is the rule? (there may be more than one answer)

A

x	y
1	4
2	4
3	4
4	4

B

x	y
1	2
2	4
3	6
4	8

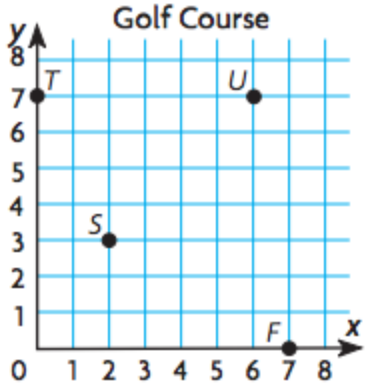
C

x	y
1	3
2	4
3	5
4	6

D

x	y
1	5
2	6
3	7
4	8

7. Which point is closest to (7,1)?

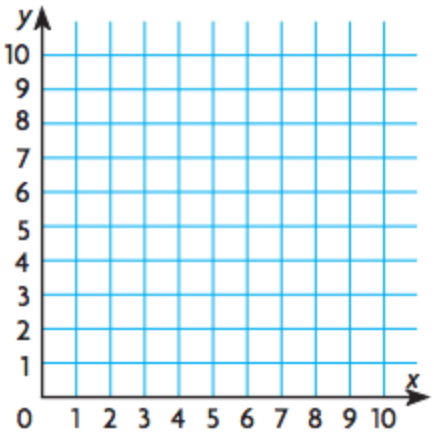


8. From the origin of a coordinate graph, what movements are necessary to plot the ordered pair (7,8)?

A Move right 8 units and then up 7 units

B Move left 7 units and then up 8 units
C Move left 8 units and then up 7 units
D Move right 7 units and then up 8 units

9. Mrs. Fornfeist kicked a soccer ball from (1,2) to (8,5). Through which point did the soccer ball pass?



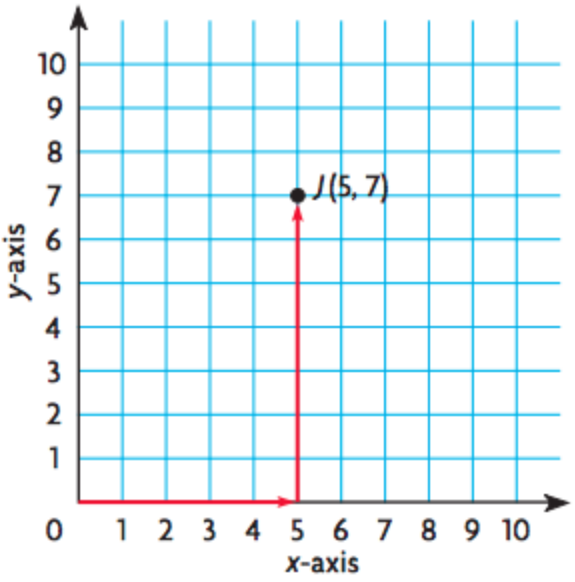
10. Apply the rule y = 2x to the numbers below to find y.

x	y
1	
3	
5	
7	

11. All (x,y) ordered pairs that follow the rule y=4x are graphed on the coordinate plane. Which of the points is on the graph?

a. (12,3)
b. (2,12)
c. (3, 12)
d. (4,8)

12. If 4 is subtracted from the value of the y-coordinate for the point location, how will the location change?



13. All (x,y) ordered pairs that follow the rule y=x+5 are graphed on a coordinate plane. Which of the following points is on the graph?

a. (4,1)
b. (1,4)
c. (8,3)
d. (3,8)

14. Input x = 4, 8, 6, 10

output y = 2, 4, 3, 5

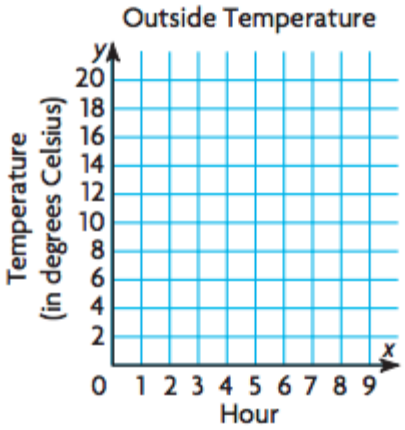
The output is half of the input. Draw and label a coordinate plane and put the ordered pairs on the graph.

15. Write the ordered pairs and draw and label the graph.

Outside Temperature					
Hour	1	2	3	4	5
Temperature (in °C)	8	10	11	12	16

Ordered pairs: _____

_____

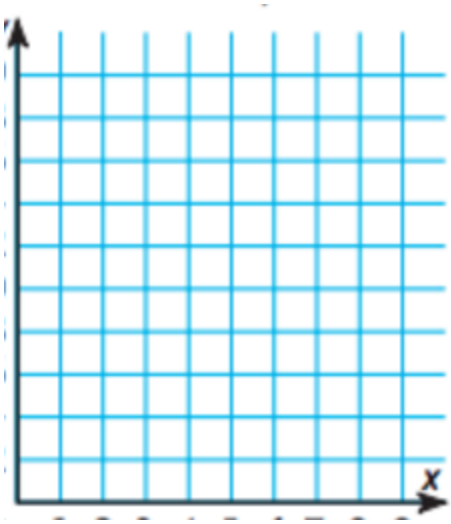


16. Complete the table for the following pattern rule

y=x+7

x = 1 2 3 4 5
y =

17. Make a input-output table where the value, y, is 2 less than the input value, x. Write the pattern rule. Then draw and label a graph with those ordered pairs.

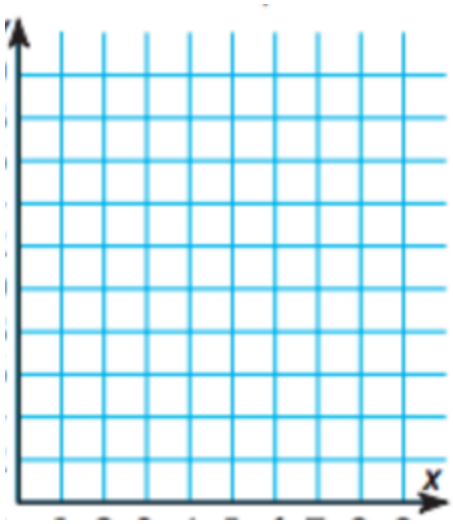


18. Windsong Intermediate is located at (4,8) on a coordinate map. To get to HEB from Windsong, you must travel 3 units right and 4 units down. At what point is HEB located?

19. Make an input-output table that follows the rule y=x+5. Use 4 inputs.

20. Put the ordered pairs on the graph.

Weight of a Bird Feeder					
Day	1	2	3	4	5
Weight (in ounces)	16	12	6	4	3



Optional 6th grade skills questions:

21. Order the following numbers least to greatest:
5, -3, 6, 2,-1, -2, 1, 0

22. Draw a graph with the x-axis numbered -3 to 3 and the y-axis numbered 3 to -3. Label the quadrants.