CRCT GPS Practice . Chapter 4

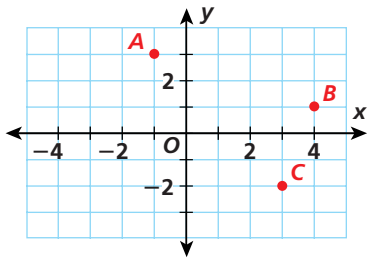
LESSON 4-1

Plot each point on a coordinate plane. Identify the quadrant that contains each point.

1. $M(-1, 1)$ **2.** $N(4, 4)$ **3.** $Q(3, -1)$

Give the coordinates of each point.

4. A **5.** B **6.** C



LESSON 4-2

Write the ordered pairs from each table.

7.

x	1	2	3	4
y	0	1	2	3

8.

x	5	10	15	20
y	−1	−1	−1	−1

9.

x	2	4	6	8
y	−3	−2	−1	0

Write and graph the ordered pairs from each table.

10.

x	1	2	3	4
y	−3	−2	−1	0

11.

x	0	2	4	6
y	−1	0	1	2

12.

x	−2	−1	0	1
y	3	3	3	3

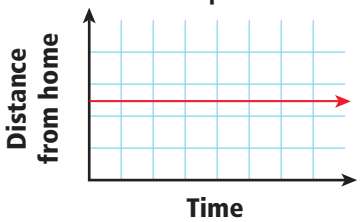
13. The table shows the total cost of buying different numbers of bottles of water. Graph the data to find the cost of buying 10 bottles of water.

Number of Bottles	1	2	3	4
Total Cost ($)	1.75	3.50	5.25	7.00

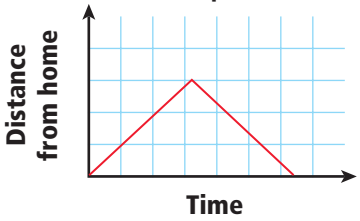
LESSON 4-3

14. Abby rode her bike to the park. She had a picnic there with friends before biking home. Which graph best shows the situation?

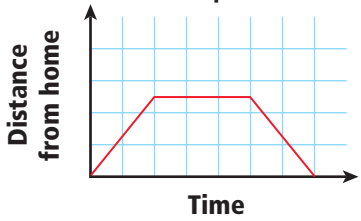
Graph A



Graph B



Graph C



15. Mallory and her sister Jamie walked to a restaurant near their house and had lunch. They then walked to the pool across the street and went for a swim. Their mom picked them up from the pool and drove them home. Sketch a graph to show the distance that the two sisters traveled compared to time.

16. Jose is selling tins of popcorn to make money for a school fund-raiser. Each tin of popcorn sells for $12. Draw a graph to show his possible income from sales.

LESSON 4-4

Find the output for each input.

17.

Input	Rule	Output
x	$3x - 1$	y
−2		
0		
2		

18.

Input	Rule	Output
x	$4x^2$	y
1		
3		
5		

Make a function table, and graph the resulting ordered pairs.

19. $y = 2x - 5$

Input	Rule	Output	Ordered Pair
x	$2x - 5$	y	(x, y)
0			
1			
2			

20. $y = x^2 - 1$

Input	Rule	Output	Ordered Pair
x	$x^2 - 1$	y	(x, y)
0			
1			
2			

LESSON 4-5

Tell whether each sequence of y-values is arithmetic or geometric. Then find y when $n = 5$.

21.

n	1	2	3	4	5
y	−4	0	4	8	

22.

n	1	2	3	4	5
y	2	4	8	16	

Write a function that describes each sequence.

23. 5, 6, 7, 8, . . .

24. −4, −3, −2, −1, . . .

25. 1, 8, 27, 64, . . .

26. 2, 5, 10, 17, . . .

27. Tim wants to increase the number of miles he runs each week. His plan is to run 10 miles the first week, 12 miles the second week, 14 miles the third week, and 16 miles the fourth week. Write a function that describes the sequence, and then use the function to predict how many miles Tim will run during the eighth week.

LESSON 4-6

Graph each linear function.

28. $y = 2x + 2$

29. $y = x - 3$

30. $y = -x + 2$

31. The outside temperature is increasing at the rate of 6°F per hour. When Reid begins measuring the temperature, it is 52°F. Write a linear function that describes the outside temperature over time. Then make a graph to show the temperature over the first 3 hours.