

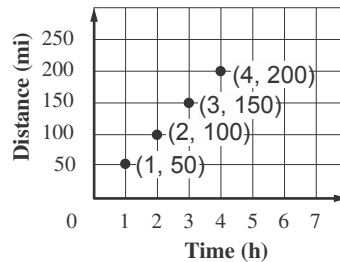
# Test, Form 2A

Write the letter for the correct answer in the blank at the right of each question.

1. Which ordered pair is *not* a point on the graph of  $y = \frac{1}{2}x - 7$ ?  
 A.  $(1, -6\frac{1}{2})$     B.  $(-2, -8)$     C.  $(0, -7)$     D.  $(2, 8)$     1. \_\_\_\_\_

2. What is  $f(-2)$  if  $f(x) = \frac{1}{2}x$ ?  
 F.  $-2$     G.  $-1$     H.  $0$     I.  $1$     2. \_\_\_\_\_

3. The graph at the right shows Jeremy's distance from home each hour he is on a car trip. How many miles will he be from home after 10 hours?  
 A. 350 miles    C. 500 miles  
 B. 400 miles    D. 550 miles



3. \_\_\_\_\_

4. Which table represents a linear function?

F. 

x	5	3	1	-1
y	6	8	10	12

H. 

x	-2	0	2	4
y	0	1	3	6

G. 

x	-3	-1	1	3
y	1	4	9	16

I. 

x	7	4	1	-2
y	-1	-3	-6	-9

4. \_\_\_\_\_

5. Juana's monthly cost of sending text messages can be represented by the function  $y = 0.05x$ , where  $y$  represents the total cost and  $x$  represents the number of text messages. The table shows Tanya's monthly cost of sending text messages. Which statement is *not* true?

Messages	Cost (\$)
20	10
30	11
40	12
50	13

- A. Tanya's initial cost is greater than Juana's initial cost.  
 B. Tanya pays more per text than Juana.  
 C. Juana pays \$7.50 for sending 150 text messages.  
 D. Tanya pays \$20 for sending 150 text messages.

5. \_\_\_\_\_

6. Which of the following represents a nonlinear function?

- F.  $y = 5x + 7$     G.  $y = x^2$     H.  $y = -2x$     I.  $y = x$

6. \_\_\_\_\_

# Test, Form 2A *(continued)*

SCORE \_\_\_\_\_

7. Nate has a certain number of songs on his MP3 player. Each week, he plans to add 2 more songs. After 5 weeks, he had 25 songs on his MP3 player. Which statement is true?
- A. Nate adds 5 songs on his MP3 player per week.
  - B. Nate adds 10 songs on his MP3 player per week.
  - C. The initial number of songs on Nate's MP3 player is 15.
  - D. The initial number of songs on Nate's MP3 player is 2.

7. \_\_\_\_\_

8. State the domain and range for the following relation.  
 $\{(-4, 4), (1, 2), (0, 3), (3, 2)\}$

8. \_\_\_\_\_

9. Complete the function table for  $f(x) = -2x + 1$ .

$x$	$f(x)$
-2	
0	
1	
2	

9.

**For Exercises 10 and 11, consider the following situation.**

The grocery store sells cantaloupes for \$4.50 per pound.

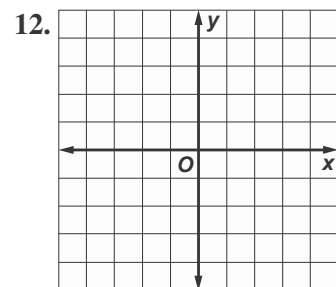
10. Write a function to represent the situation.

10. \_\_\_\_\_

11. Is the function continuous or discrete? Explain.

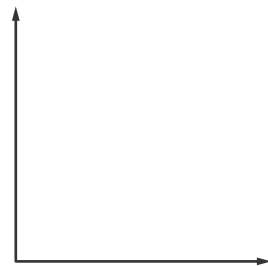
11. \_\_\_\_\_

12. Graph  $y = x^2 - 2$ .



12.

13. The value of a painting has increased steadily over time.  
 Sketch a qualitative graph to represent this situation.



13. \_\_\_\_\_