

# Test, Form 2B

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  $y = -5x + 2$ ?

- A.  $(-1, 6)$       B.  $(0, 2)$       C.  $(-2, 12)$       D.  $(2, -8)$

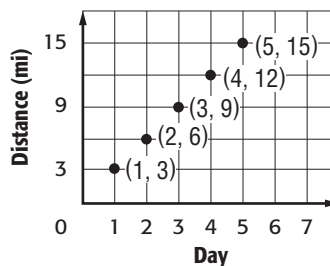
1.     **A**    

2. What is  $f(-3)$  if  $f(x) = \frac{1}{3}x$ ?

- F. 3      G. 1      H. -1      I. -3

2.     **H**    

3. The graph at the right shows Lanna's total distance in miles for each day she is training for a marathon. What is her distance on day 10?



- A. 21 miles      C. 30 miles  
B. 27 miles      D. 33 miles

3.     **C**    

4. Which table represents a linear function?

F. 

$x$	5	2	-1	-4
$y$	6	7	10	12

H. 

$x$	4	6	9	15
$y$	3	4	5	6

G. 

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

I. 

$x$	7	4	1	-2
$y$	-1	-3	-6	-10

4.     **G**    

5. Kayla's monthly cost of sending text messages can be represented by the function  $y = 0.07x$ , where  $y$  represents the total cost and  $x$  represents the number of text messages. The table shows Aubrey's monthly cost of sending text messages. Which statement is *not* true?

Messages	Cost (\$)
30	18
40	19
50	20
60	21

- A. Kayla pays \$10.50 for sending 150 text messages.  
B. Aubrey pays \$30 for sending 150 text messages.  
C. Aubrey pays more per text than Kayla.  
D. Kayla's initial cost is greater than Aubrey's initial cost.

5.     **D**    

6. Which of the following represents a nonlinear function?

- F.  $y = 4x^2$       G.  $y = x$       H.  $y = -9x$       I.  $y = 8x + 10$

6.     **F**

# Test, Form 2B *(continued)*

7. Roberto has a certain number of songs on his MP3 player. Each week, he plans to add 4 more songs. After 5 weeks, he had 40 songs on his MP3 player. Which statement is true?
- A. Roberto adds 5 songs on his MP3 player per week.
  - B. Roberto adds 10 songs on his MP3 player per week.
  - C. The initial number of songs on Roberto's MP3 player is 10.
  - D. The initial number of songs on Roberto's MP3 player is 20.

7.                      **D**

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

8.                      domain:  $\{0, 1, 3, 4\}$ ;  
 range:  $\{-3, -1, 2, 4\}$

9. Complete the function table for  $f(x) = 3x + 2$ .

9.

$x$	$f(x)$
-2	-4
-1	-1
0	2
1	5

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

The grocery store sells bacon for \$5.30 per pound.

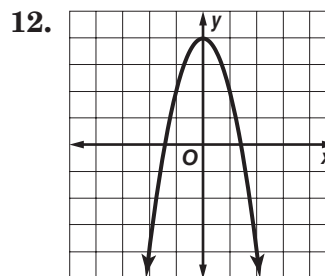
10. Write a function to represent the situation.

10.                       **$c = 5.3p$**

11. Is the function continuous or discrete? Explain.

11.                      continuous; You can have a fraction of a pound when you weigh bacon.

12. Graph  $y = -2x^2 + 4$ .



13. The value of a football card has increased steadily over time. Sketch a qualitative graph of the situation.

