

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

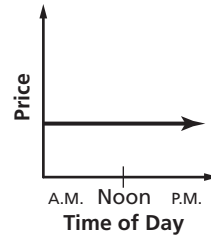
1. Write an algebraic expression for *nine times of the square of a number*.  
 A  $9 + x^2$       B  $9 - x^2$       C  $9x^2$       D  $x^2 - 9$       1. \_\_\_\_\_
2. Write a verbal expression for  $2n + 7$ .  
 F the product of 2,  $n$ , and 7      H 7 less than a number times 2  
 G 7 more than twice a number      J 7 more than  $n$  and 2      2. \_\_\_\_\_
3. Evaluate  $6 + 2 \cdot 3 - 1$ .  
 A 23      B 10      C 16      D 11      3. \_\_\_\_\_
4. Evaluate  $2(11 - 5) + 9 \div 3$ .  
 F 18      G 15      H 30      J 11      4. \_\_\_\_\_
5. Evaluate  $x^2 + xyz$  if  $x = 3$ ,  $y = 5$ , and  $z = 4$ .  
 A 69      B 63      C 85      D 21      5. \_\_\_\_\_
6. Which equation illustrates the Multiplicative Inverse Property?  
 F  $0 \cdot 16 = 0$       H  $3 \cdot \frac{1}{3} = 1$   
 G  $1(48) = 48$       J  $9(1 + 0) = 9(1)$       6. \_\_\_\_\_
7. Evaluate  $29 \cdot 1 + 2(20 \div 4 - 5)$ .  
 A 0      B 30      C 29      D 28      7. \_\_\_\_\_
8. Simplify  $r^2 - 2r^3 + 3r^2$ .  
 F  $4r^2 - 2r^3$       G  $2r$       H  $3r^2 - 2r^3$       J  $4r^2$       8. \_\_\_\_\_
9. Simplify  $3(2x + 4y - y)$ .  
 A  $5x + 6y$       B  $6x + 9y$       C  $6x + 3y$       D  $5x + 11y$       9. \_\_\_\_\_
10. Use the Distributive Property to find  $6(14 + 7)$ .  
 F 91      G 126      H 42      J 56      10. \_\_\_\_\_
11. Simplify  $2(a + 3b) + 3(4a + b)$ .  
 A  $6a + 6b$       B  $14a + 9b$       C  $14a + 4b$       D  $6a + 7b$       11. \_\_\_\_\_
12. Evaluate  $3\frac{2}{5} + 7 + 4\frac{1}{5}$ .  
 F  $7\frac{3}{2} + 7$       G  $14\frac{3}{10}$       H  $84\frac{3}{5}$       J  $14\frac{3}{5}$       12. \_\_\_\_\_
13. Find the solution of  $\frac{n}{2} - 11 = 3$  if the replacement set is  $\{26, 28, 29, 30, 31\}$ .  
 A 26      B 28      C 30      D 31      13. \_\_\_\_\_
14. Somerville High School raised \$740 to buy winter coats for the homeless at \$46.25 each. How many coats can they buy?  
 F 12      G 16      H 24      J 34,225      14. \_\_\_\_\_

## 1

## Chapter 1 Test, Form 2A (continued)

15. Which statement best describes a daily stock price?

- A The price increased.  
 B The price decreased.  
 C The price did not change.  
 D The price increased then decreased.

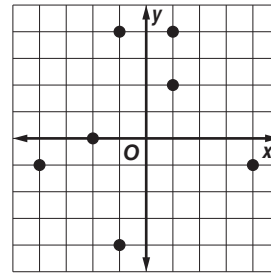


15. \_\_\_\_\_

For Questions 16 and 17, use the graph.

16. What is the domain of the relation?

- F  $\{-4, -1, 0, 2, 4\}$       H  $\{-4, -2, -1, 0, 1, 2, 4\}$   
 G  $\{-4, -2, -1, 1, 4\}$       J  $\{-1, 1\}$

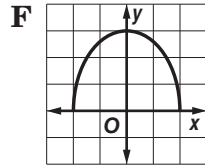


16. \_\_\_\_\_

17. Which is a true statement about the relation?

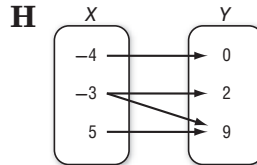
- A The relation is a linear function.  
 B The value of  $x$  increases as  $y$  decreases.  
 C The value of  $x$  increases as  $y$  increases.  
 D The relation is not a function.

17. \_\_\_\_\_

18. Determine which relation is *not* a function.

G

x	y
-2	0
0	0
1	2
3	1



J

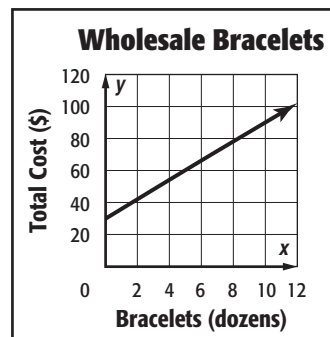
x	y
-4	0
-3	9
5	2
6	9

18. \_\_\_\_\_

For Questions 19 and 20, use the graph.

19. Interpret the y-intercept of the graph.

- A 0 bracelets cost about \$30.  
 B 1 dozen bracelets cost about \$30.  
 C 28 dozen bracelets cost \$0.  
 D Each dozen bracelets costs about \$5.



19. \_\_\_\_\_

20. Interpret the end behavior of the function.

- F The total cost decreases.  
 G The cost per dozen decreases.  
 H The total cost increases.  
 J The cost per dozen increases.

20. \_\_\_\_\_

**Bonus** Find the value of  $f$  in the equation  $f = \frac{4}{5}(200 - m) + a$   
 if  $m = 100$  and  $a = 132$ .

B: \_\_\_\_\_