Chapter 1 Test, Form 1

SCORE _____

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

1. Write an algebraic expression for the sum of a number and 8.

$$\mathbf{A} 8x$$

B
$$x - 8$$

C
$$x + 8$$

$$\mathbf{D} x \div 8$$

2. Write an algebraic expression for 27 decreased by a number.

$$F 27 + m$$

G
$$27 - m$$

H
$$m - 27$$

$$\mathbf{J} \frac{27}{m}$$

3. Write a verbal expression for 19*a*.

A the sum of 19 and a number

B the difference of 19 and a number

C the quotient of 19 and a number **D** the product of 19 and a number

3. <u>D</u>

4. Write a verbal expression for x + y.

 \mathbf{F} the sum of x and y

G the quotient of x and y

H the difference of x and y **J** the product of x and y

4. ____F

5. Evaluate 6(8-3).

A 45

B 30

C 11

D 66

5. B

6. Evaluate 2k + m if k = 11 and m = 5.

F 32

G 216

H 27

J 18

7. Name the property used in n + 0 = 7.

A Multiplicative Inverse Property

B Substitution Property

C Additive Identity Property

D Multiplicative Identity Property

. ____C

8. Evaluate 13 + 6 + 7 + 4.

F 2184

G 29

H 20

J 30

8. _____J

9. Simplify 7b + 2b + 3c.

A 12*bc*

B
$$9b + 3c$$

C 7b + 5c

D 5b + 3c

9. ____<mark>B</mark>___

10. Simplify 5(2g + 3).

$$F 10g + 3$$

$$G7g + 3$$

H 10g + 15

J7g + 8

10. __ H

11. Evaluate $4 \cdot 1 + 6 \cdot 16 + 0$.

A 100

 $\mathbf{B} 0$

C 8

D 185

11. A

12. Which of the following uses the Distributive Property to determine the product 12(185)?

 $\mathbf{F} 12(100) + 12(13)$

$$\mathbf{H} 12(18) + 12(5)$$

$$\mathbf{G} 12(1) + 12(8) + 12(5)$$

$$\mathbf{J}\ 12(100) + 12(80) + 12(5)$$

12. _____J

13. Find the solution of x + 4 = 7 if the replacement set is $\{1, 2, 3, 4, 5\}$.

A 1

B 3

C 4

D 2

13. B

14. A car rental company charges a rental fee of \$20 per day in addition to a charge of \$0.30 per mile driven. How much does it cost to rent a car for a day and drive it 25 miles?

F \$45.30

G \$20.30

H \$27.50

J \$26.00

14. ____H

Chapter 1 Test, Form 1

(continued)

- 15. Which statement best describes the graph of the price of one share of a company's stock shown at the right?
 - **A** The price increased more in the morning than in the afternoon.
 - **B** The price decreased more in the morning than in the afternoon.
 - **C** The price increased more in the afternoon than in the morning.
 - **D** The price decreased more in the afternoon than in the morning.



Social Networking

24 36 **Months Since February 2005**

Used Social Networking Site (percent of polled)

40

10

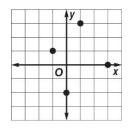
16. What is the domain of the relation?

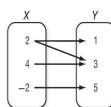
$$\mathbf{F}$$
 {-1, 0, 1, 3}

$$\mathbf{H}$$
 {-2, -1, 0, 1, 2, 3}

$$G$$
 {-2, 0, 1, 3}

17. Determine which relation is a function.





C	x	3	4	4	5
	у	– 1	2	3	4

B
$$y = \frac{1}{5}x + 2$$

$$\mathbf{D}$$
 {(3, 0), (-2, -2), (7, -2), (-2, 0)}

18. If $h(r) = \frac{2}{3}r - 6$, what is the value of h(-9)? **F** 12 **G** 0 $\mathbf{H} - 6\frac{2}{3}$

$$\mathbf{G}$$

$$H - 6\frac{2}{3}$$

For Questions 19 and 20, use the graph.

- **19.** Interpret the *y*-intercept of the graph.
 - A All those polled used a social networking site 8 months after February 2005.
 - **B** About 8% of those polled used a social networking site in February 2005.
 - C No one used a social networking site in February 2005.
 - **D** There were 8 social networking sites in February 2005.
- 20. Interpret the end behavior of the function in terms of social networking.

F expected to decrease

H expected to level off at 55%

G expected to increase

J expected to level off at 8%



Bonus Simplify (4x + 2)3.

