NAME _____ DATE _____ PERIOD _____

1 Standardized Test Practice

(Chapter 1)

SCORE _____

Part 1: Multiple Choice

Instructions: Fill in the appropriate circle for the best answer.

1. Write an algebraic expression to represent the number of pens that can be bought with 30 cents if each pen costs c cents. (Lesson 1-1)

A $30 - c$ **B** $\frac{30}{c}$ **C** $30 + c$ **D** $30c$ **1.** Ⓐ Ⓑ Ⓒ Ⓓ

2. Evaluate $\frac{7a + b}{b + c}$ if $a = 2$, $b = 6$, and $c = 4$. (Lesson 1-2)

F $3\frac{1}{3}$ **G** $1\frac{1}{2}$ **H** 3 **J** 2 **2.** Ⓕ Ⓖ Ⓗ Ⓙ

3. Find the solution of $3(y + 7) \leq 39$ if the replacement set is $\{2, 4, 6, 8, 10, 12\}$. (Lesson 1-5)

A $\{2, 4\}$ **B** $\{6, 8, 10, 12\}$ **C** $\{8, 10, 12\}$ **D** $\{2, 4, 6\}$ **3.** Ⓐ Ⓑ Ⓒ Ⓓ

4. The equation $4 + 9 = 4 + 9$ is an example of which property of equality? (Lesson 1-3)

F Substitution **G** Reflexive **H** Symmetric **J** Transitive **4.** Ⓕ Ⓖ Ⓗ Ⓙ

5. Simplify $7x^2 + 5x + 4x$. (Lesson 1-4)

A $7x^2 + 9x$ **B** $16x^4$ **C** $12x^3 + 4x$ **D** $7x^2 + x$ **5.** Ⓐ Ⓑ Ⓒ Ⓓ

6. Simplify $7(2x + y) + 6(x + 5y)$. (Lesson 1-4)

F $20x + 37y$ **G** $20x + 6y$ **H** $13x + 42y$ **J** $15x + 6y$ **6.** Ⓕ Ⓖ Ⓗ Ⓙ

For Questions 7 and 8, use the following statement.
If x is a multiple of 2, then x is divisible by 4.

7. Identify the hypothesis of the statement. (Lesson 1-8)

A x is a multiple of 2 **C** x is divisible by 4
B $x = 2$ **D** $x = 4$ **7.** Ⓐ Ⓑ Ⓒ Ⓓ

8. Which number is a counterexample for the statement? (Lesson 1-8)

F 20 **G** 4 **H** 32 **J** 10 **8.** Ⓕ Ⓖ Ⓗ Ⓙ

9. The distance an airplane travels increases as the duration of the flight increases. Identify the dependent variable. (Lesson 1-6)

A time **B** direction **C** airplane **D** distance **9.** Ⓐ Ⓑ Ⓒ Ⓓ

10. Omari drives a car that gets 18 miles per gallon of gasoline. The car's gasoline tank holds 15 gallons. The distance Omari drives before refueling is a function of the number of gallons of gasoline in the tank. Identify a reasonable domain for this situation. (Lesson 1-6)

F 0 to 18 miles **H** 0 to 270 miles
G 0 to 15 gallons **J** 0 to 60 mph **10.** Ⓕ Ⓖ Ⓗ Ⓙ

NAME _____ DATE _____ PERIOD _____

1 Standardized Test Practice *(continued)*

11. Evaluate $x^2 + y^2 + z$, if $x = 7$, $y = 6$, and $z = 4$. (Lesson 1-2)

A 17 **B** 101 **C** 89 **D** 59 **11.** Ⓐ Ⓑ Ⓒ Ⓓ

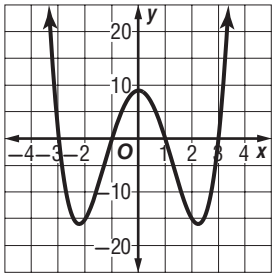
12. Find the solution of $20 = 5(7 - x)$ if the replacement set is $\{0, 1, 2, 3, 4, 5, 6\}$. (Lesson 1-5)

F 0 **G** 1 **H** 2 **J** 3 **12.** Ⓕ Ⓖ Ⓗ Ⓙ

13. Using the Distributive Property to find $9\left(5\frac{2}{3}\right)$ would give which expression? (Lesson 1-4)

A $9(5) + \frac{2}{3}$ **B** $9\left(\frac{17}{3}\right)$ **C** $9(5) + 9\left(\frac{2}{3}\right)$ **D** $9(5)\left(\frac{2}{3}\right)$ **13.** Ⓐ Ⓑ Ⓒ Ⓓ

14. Which sentence best describes the end behavior of the function shown? (Lesson 1-8)



F As x increases, y decreases, and as x decreases, y decreases.

G As x increases, y increases, and as x decreases, y decreases.

H As x increases, y decreases, and as x decreases, y increases.

J As x increases, y increases, and as x decreases, y increases. **14.** Ⓕ Ⓖ Ⓗ Ⓙ

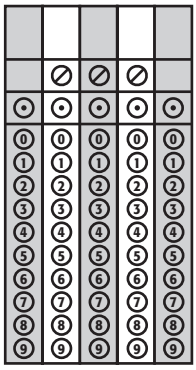
15. If $g(x) = x^2 + 5$, find $g(3)$. (Lesson 1-7)

A 8 **B** 9 **C** 11 **D** 14 **15.** Ⓐ Ⓑ Ⓒ Ⓓ

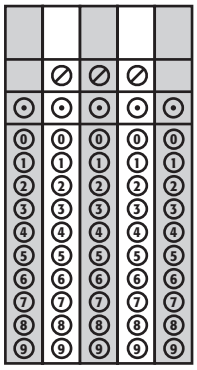
Part 2: Gridded Response

Instructions: Enter your answer by writing each digit of the answer in a column box and then shading in the appropriate circle that corresponds to that entry.

16. Evaluate $4(16 \div 2 + 6)$. (Lesson 1-2)



17. Evaluate $2 + x(2y + z)$ if $x = 5$, $y = 3$, and $z = 4$. (Lesson 1-2)



NAME _____ DATE _____ PERIOD _____

1 Standardized Test Practice *(continued)*

Part 3: Short Response

Instructions: Write your answers in the space.

Find each product or quotient.
(Prerequisite Skill)

18. $17 \cdot 8$

19. $84 \div 7$

20. $0.9 \cdot 5.6$

21. $\frac{8}{9} \div \frac{16}{3}$

22. Write an algebraic expression for *six less than twice a number*. (Lesson 1-1)

23. Write a verbal expression for $4m^2 + 2$. (Lesson 1-1)

24. Evaluate $13 - \frac{1}{3}(11 - 5)$. (Lesson 1-2)

25. Evaluate $\frac{2b + c^2}{a}$, if $a = 2$, $b = 4$, and $c = 6$. (Lesson 1-2)

26. Evaluate $3(5 \cdot 2 - 9) + 2 \cdot \frac{1}{2}$. (Lesson 1-2)

27. Evaluate $\frac{1}{3} \cdot 20 \cdot 6 \cdot \frac{1}{5}$ using the properties of numbers. (Lesson 1-3)

Simplify each expression.

28. $7n + 4n$ (Lesson 1-4)

29. $5y + 3(2y + 1)$ (Lesson 1-4)

30. Solve $2(7) + 4 = x$. (Lesson 1-5)

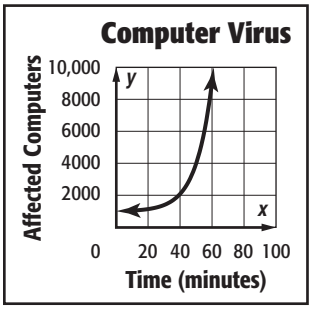
31. Find the solution of $3x - 4 = 2$ if the replacement set is $\{0, 1, 2, 3, 4, 5\}$. (Lesson 1-5)

32. Alvin is mowing his front lawn. His mailbox is on the edge of the lawn. Draw a reasonable graph that shows the distance Alvin is from the mailbox as he mows. Let the horizontal axis show the time and the vertical axis show the distance from the mailbox. (Lesson 1-6)

33. Identify and interpret each feature of the graph shown. (Lesson 1-8)

a. intercept(s)

b. end behavior



18. _____

19. _____

20. _____

21. _____

22. _____

23. _____

24. _____

25. _____

26. _____

27. _____

28. _____

29. _____

30. _____

31. _____

32. _____

33a. _____

33b. _____