Standardized Test Practice

SCORE

(Chapters 1–8)

Part 1: Multiple Choice

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

1. If $\frac{x}{8} > x$, which could be a value for x?

- $\mathbf{A} 1$
- \mathbf{B} 0
- · C 2
- $\mathbf{D} \frac{1}{4}$
- 1.0000

2. If 0 < a < 1, which of the following increases as a decreases?

- $\mathbf{F} \dot{a} 1$
- $G a^2 1$
- $\mathbf{H} \frac{1}{a}$
- $\mathbf{J} a^2$
- 2. O O O O

3. If 3x - 2 is an odd integer, what is the next consecutive odd integer?

- $\mathbf{A} 3x 1$
- **B** 3x 3
- C 3x + 1
- $\mathbf{D} = 3x$
- 3. (8) (8) (9)

4. Jody sold 4 more than twice the number of cars that Laura sold. If Laura sold c cars, how many more did Jody sell than Laura?

- Gc+4
- **H** 3c + 4
- **J** 2c + 4
- 4. © © ® O

5. If 8 - 3z = 16 + 5z, then what is the value of 4z?

- \mathbf{B} -4
- \mathbf{C} 1
- **D** 12.
- 5. O O O

6. The radius of a wheel is 6 inches. How many revolutions will it make if it is rolled a distance of 288π inches?

- **F** 8
- $G 8\pi$
- H 24
- $J 24\pi$
- 6. O O O O

7. What is the 8th term in the sequence 3, 2, 0, -4, -12, ...?

- A 124
- B 60
- C 36
- D 144
- 7. 0 0 0 0

8. Which Venn diagram models the relationships among the sets

 $A = \{1, 2, 3\}, B = \{-4, 0\}, \text{ and } C = \{\text{positive integers}\}$?

 \mathbf{F}

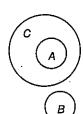


G



 \mathbf{H}





8.0000

9. A total of \$270 is to be divided among four children. Each will receive an amount that is proportional to his or her age. If the children are 5, 10, 14, and 16 years old, how much money does the youngest child receive?

- A \$96
- **B** \$6
- C \$30
- **D** \$54
- 9. O O O

10. If $m^2 + n^2 = 140$ and mn = 49, what is the value of $(m - n)^2$?

- F 0
- \mathbf{G} 24
- H 238
- J 42
- 10. 6 6 8 0

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(continued)

11. What is the slope of a line that is perpendicular to the graph of 5x + 4y = 7?

$$A - \frac{5}{4}$$

B
$$\frac{5}{4}$$

$$C - \frac{4}{5}$$

$$D_{\frac{4}{5}}$$

12. The graph of which equation is a line with undefined slope that passes through (5, 1)?

F
$$y = 1$$

$$Gy = 5$$

$$\mathbf{H} x = 1$$

$$\mathbf{J} x = 5$$

13. Which point does not satisfy the inequality y < |2x - 3|?

B
$$(-1, -3)$$

$$\mathbf{D}$$
 (2, 0)

14. To solve the system of equations 3x - y = 5 and 2x + 3y = 18, which expression could be substituted for y into the second equation?

$$\mathbf{F} \ 5 - 3x$$

G
$$3x - 5$$

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

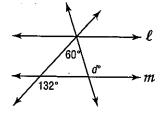
J
$$18 - 2x$$

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.

15. If $\ell \parallel m$ in the figure shown, what is the value of d?



16. Find the perimeter of square *EFGH* if the areas of rectangle *ABCD* and square *EFGH* are equal.

