

# 8 Standardized Test Practice

SCORE \_\_\_\_\_

(Chapters 1–8)

## Part 1: Multiple Choice

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

- If 6 more than the product of a number and  $-2$  is greater than 10, which of the following could be that number?  
**A**  $-3$                       **B**  $-2$                       **C**  $0$                       **D**  $3$                       1. **A** **B** **C** **D**
- If the diameter of a circle is doubled, then the area is multiplied by \_\_\_\_\_.  
**F**  $2$                       **G**  $4$                       **H**  $8$                       **J**  $16$                       2. **F** **G** **H** **J**
- Which represents an irrational number?  
**A**  $-\frac{1}{3}$                       **B**  $1$                       **C**  $\sqrt{2}$                       **D**  $\sqrt{9}$                       3. **A** **B** **C** **D**
- If  $a < 0$ , which of the following must be true?  
**F**  $a - 2 < 2 - a$                       **H**  $-2a < a^2$   
**G**  $a - 2 < 2a$                       **J**  $a^2 > a + 2$                       4. **F** **G** **H** **J**
- A cube is equal in volume to a rectangular solid with edges that measure 4, 6, and 9. What is the measure of an edge of the cube?  
**A**  $216$                       **B**  $36$                       **C**  $108$                       **D**  $6$                       5. **A** **B** **C** **D**
- If  $abc = 30$  and  $b = c$ , then  $a$  equals which of the following?  
**F**  $\frac{30}{c^2}$                       **G**  $\frac{15}{c}$                       **H**  $30c^2$                       **J**  $15c$                       6. **F** **G** **H** **J**
- What is the value of  $(a - b)^3$  if  $b = a + 2$ ?  
**A**  $-8$                       **B**  $-6$                       **C**  $6$                       **D**  $8$                       7. **A** **B** **C** **D**
- In the figure,  $WXZ$  and  $XYZ$  are isosceles right triangles. If  $XY = 8$ , find the perimeter of quadrilateral  $WXYZ$ .  
**F**  $16 + 16\sqrt{2}$                       **H**  $24 + 8\sqrt{2}$   
**G**  $32 + 8\sqrt{2}$                       **J**  $32 + 16\sqrt{2}$                       8. **F** **G** **H** **J**
- In a 30-day month, how many weekend days fall on dates that are prime numbers if the first day of the month is Thursday?  
**A**  $2$                       **B**  $3$                       **C**  $4$                       **D**  $5$                       9. **A** **B** **C** **D**
- Sonia purchased 5 pencils and 2 pens for \$5.10. Wai purchased 8 of the same type of pencil and 6 of the same type of pen, and spent \$13.20. What is the cost of 2 pencils and one pen?  
**F** \$2.10                      **G** \$3.90                      **H** \$1.80                      **J** \$2.40                      10. **F** **G** **H** **J**

