

**Geometry**  
**Blizzard Bag #3**

Directions: Complete the following review sheet from Chapters 1 to 7. Be sure to show your work. You will have 2 weeks to complete from the “Snow Day.” No Late work will be accepted.

Enjoy!

# 7 Standardized Test Practice

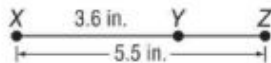
(Chapters 1-7)

**Part 1: Multiple Choice**

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

1. Find the length of  $\overline{YZ}$ . (Lesson 1-2)

- A 1.9 in.                      C 7.2 in.  
 B 5.3 in.                      D 12.5 in.



1. (A) (B) (C) (D)

2. Given:  $3b + 4 < 16$

Conjecture:  $b > 0$

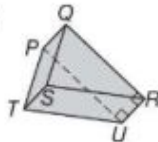
Which of the following would be a counterexample? (Lesson 2-1)

- F  $b = -1$                       G  $b = 0$                       H  $b = 3.5$                       J  $b = 4$

2. (F) (G) (H) (J)

3. Find the plane that is parallel to plane  $PTU$ . (Lesson 3-1)

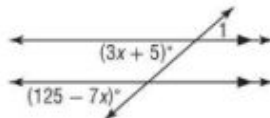
- A plane  $QRU$                       C plane  $PQS$   
 B plane  $QRS$                       D plane  $SPU$



3. (A) (B) (C) (D)

4. Find  $m\angle 1$ . (Lesson 3-2)

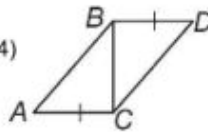
- F 5                                      H 41  
 G 12                                  J 44



4. (F) (G) (H) (J)

5. Which statement *must* be true in order to prove  $\triangle ABC \cong \triangle DCB$  by SAS? (Lesson 4-4)

- A  $\overline{CB}$  bisects  $\angle ABD$ .  
 B  $\angle BCA \cong \angle CBD$   
 C  $\angle BDC \cong \angle CAB$   
 D  $\overline{AB} \cong \overline{BC}$



5. (A) (B) (C) (D)

6. In an indirect proof, you assume that the conclusion is false and then find a(n)

\_\_\_\_\_? (Lesson 5-4)

- F assumption                      H truth value  
 G contradiction                      J conditional statement

6. (F) (G) (H) (J)

7. Demont and Tony are competing to see whose house is taller. Early in the afternoon, Tony, who is 4 feet tall, measured his shadow to be 9.6 inches and the shadow of his house to be 62.4 inches. Later in the day, Demont, who is 5 feet tall, measured his shadow to be 15.6 inches and the shadow of his house to be 62.4 inches. Who lives in the taller house? (Lesson 7-3)

- A Demont  
 B Both houses are the same height.  
 C Tony  
 D There is not enough information.

7. (A) (B) (C) (D)

## 7 Standardized Test Practice *(continued)*

8. Find the coordinates of the midpoint of  $\overline{AB}$  for  $A(-24, 15)$  and  $B(13, -31)$ .  
 (Lesson 1-3)  
**F**  $(-18.5, -23)$       **G**  $(-11, -16)$       **H**  $(-5.5, -8)$       **J**  $(10.5, 23)$

8. **F** **G** **H** **J**

For Questions 9 and 10, use the figure at the right.



9. The perimeter of rectangle  $DEFG$  is 176,  $EF = h$ , and  $DE = 7h$ . What is the value of  $h$ ? (Lesson 1-6)  
**A** 11                              **C** 22  
**B** 15                              **D** 77

9. **A** **B** **C** **D**

10. What is the area of the rectangle  $DEFG$ ? (Lesson 1-6)  
**F** 88 units<sup>2</sup>      **G** 225 units<sup>2</sup>      **H** 513 units<sup>2</sup>      **J** 847 units<sup>2</sup>

10. **F** **G** **H** **J**

11. What is the slope-intercept form for the line  $y + 7 = 4(x - 10)$ ? (Lesson 3-4)  
**A**  $y = 4x - 47$       **B**  $4x - y = 47$       **C**  $4x = y + 17$       **D**  $4\frac{x}{y} = 17$

11. **A** **B** **C** **D**

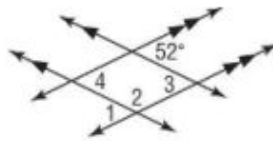
12. Which of the following is the equation of a line parallel to the line passing through  $(4, -3)$  and  $(8, 5)$ ? (Lesson 3-4)  
**F**  $y = x + 2$       **G**  $2y = 9x + 4$       **H**  $2y = 2x + 4$       **J**  $y = 2x + 9$

12. **F** **G** **H** **J**

### 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.

13. Find  $m\angle 2$ . (Lesson 3-2)



13.

	0	0	0	0
0	1	1	1	1
1	2	2	2	2
2	3	3	3	3
3	4	4	4	4
4	5	5	5	5
5	6	6	6	6
6	7	7	7	7
7	8	8	8	8
8	9	9	9	9

14.  $\triangle LMN$  is equilateral,  $LM$  is one more than three times a number,  $MN$  is nine less than five times the number, and  $NL$  is eleven more than the number. Find  $LM$ . (Lesson 4-1)

14.

	0	0	0	0
0	1	1	1	1
1	2	2	2	2
2	3	3	3	3
3	4	4	4	4
4	5	5	5	5
5	6	6	6	6
6	7	7	7	7
7	8	8	8	8
8	9	9	9	9

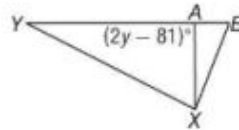
# 7 Standardized Test Practice *(continued)*

**Part 3: Short Response**  
**Instructions:** Write your answer in the space provided.

15. Solve  $\frac{-16}{40} = \frac{4x + 10}{5}$ . (Lesson 7-1)

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

16.  $\overline{XA}$  is an altitude of  $\triangle XYB$ .  
 Find the value of  $y$ . (Lesson 5-2)

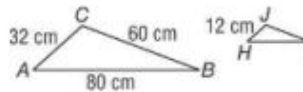


16. \_\_\_\_\_

17. Two sides of a triangle measure 21 inches and 32 inches, and the third side measures  $x$  inches. Find the range for the value of  $x$ . (Lesson 5-5)

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

18. If  $\triangle ABC \sim \triangle HIJ$ , find the perimeter of  $\triangle HIJ$ . (Lesson 7-2)



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

19. Given  $T(3, -1)$ ,  $U(1, -7)$ ,  $V(8, -5)$ ,  $W(2, 6)$ ,  $X(-4, 8)$ , and  $Y(-2, 1)$ , determine whether  $\triangle TUV \cong \triangle WXY$ . Explain. (Lesson 4-4)

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

20. Two parallel lines are cut by a transversal,  $\angle 1$  and  $\angle 2$  are adjacent angles,  $m\angle 1 = 12y + 10$ , and  $m\angle 2 = 20y - 34$ . Find  $m\angle 1$  and  $m\angle 2$ . (Lesson 3-2)

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

21. Use points  $S(-5, 7)$ ,  $T(1, 9)$ ,  $P(12, -1)$ , and  $R(3, 26)$ .

a. Find the lengths of  $\overline{ST}$  and  $\overline{PR}$  to the nearest hundredth. (Lesson 1-3)

21.a \_\_\_\_\_

b. Determine the slopes of  $\overline{ST}$  and of  $\overline{PR}$ . (Lesson 3-3)

b. \_\_\_\_\_

c. Are  $\overline{ST}$  and  $\overline{PR}$  parallel, perpendicular, or neither? (Lesson 3-3)

c. \_\_\_\_\_