Geometry Blizzard Bag #1

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

Enjoy!

2 Standardized Test Practice

SCORE

(Chapters 1-2)

Part 1: Multiple Choice

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

1. Find
$$JL$$
 if $JK = 17 - x$, $KL = 2x - 7$, and K is the midpoint of \overline{JL} . (Lesson 1-3)

A 8

C 16

1. A B C D

For Exercises 2-4, use the figure at the right.

2. What is another name for $\angle DFE$? (Lesson 1-4)

FZ1

GZ3



3. Classify $\angle 1$ if $m\angle 1 = 115$. (Lesson 1-4)

C obtuse

2. (F) (G) (H) (I)

3. A B C D

4. What can be assumed from the figure? (Lesson 1-5)

 $F \angle 1 \cong \angle 3$

$$\mathbf{H} \overline{BF} \cong \overline{FE}$$

$$\mathbf{J} \overline{CF} \perp \overline{BE}$$

5. Find the perimeter of a regular octagon if one of its sides is x + 6 and another side is 14 - x. (Lesson 1-6)

A 4

6. If $p \rightarrow q$ is the conditional, then its converse is ____? ___. (Lesson 2-3)

 $\mathbf{F} q \rightarrow p$

$$G \sim q \rightarrow p$$

$$G \sim q \rightarrow p$$
 $H \sim q \rightarrow \sim p$ $J q \rightarrow \sim p$

7. Which statement is always true? (Lesson 2-5)

 $\mathbf{A} x = 2$

$$\mathbf{B} \dot{x} = x$$

$$\mathbf{C} x = v$$

$$\mathbf{D} x \neq 0$$

8. If $\angle 1 \cong \angle 2$ and $\angle 2 \cong \angle 3$, then which is a valid conclusion? (Lesson 2-6)

I $m \angle 1 = m \angle 2$

II ∠1 ≅ ∠3

III
$$m \angle 1 + m \angle 2 = m \angle 3$$

F I, II, and III

G II only

H I and II

J I and III

8. (F) (G) (H) (D)

For Questions 9 and 10, name the property that justifies the given statement.

9. If AB = CD and CD = 11, then AB = 11. (Lesson 2-7)

A Transitive

B Symmetric C Congruence D Reflexive

9. A B C D

10. If $\angle XYZ \cong \angle PQR$, then $\angle PQR \cong \angle XYZ$. (Lesson 2-8)

F Transitive

G Symmetric H Congruence J Reflexive

10. (F) (G) (H) (D)

2 Standardized Test Practice (continued)

11. Find the distance to the nearest hundredth between the points A(1, -4) and B(5, 3). (Lesson 1-3)

A 2.23

B 5.91

C 8.06

D 11

11. A B C D

For Exercises 12-14, complete the proof of the statement.

If
$$x + 3 = 15x - 53$$
, then $x = 4$. (Lesson 2-6)

Proof:

Statements	Reasons
1. x + 3 = 15x - 53	1. Given
2. $x - x + 3 = 15x - x - 53$	2. Subtraction Property
3. (Question 12)	3. Substitution Property
4. $3 + 53 = 14x - 53 + 53$	4. (Question 13)
5. $56 = 14x$	5. Substitution Property
6. (Question 14)	6. Division Property
7. $4 = x$	7. Substitution Property
8. $x = 4$	8. Symmetric Property

12. F
$$3x = 15x - 53$$

G $x = 16x + 56$

H
$$3 = 14x - 53$$
 J $3x = 14$

12. (F) (G) (H) (J)

13. A B C D

13. A Symmetry Property

B Division Property

- C Substitution Property
- D Addition Property

14. F
$$x = \frac{14}{56}$$

$$H \frac{56}{14} = \frac{143}{14}$$

$$\mathbf{G} x = \frac{56}{14}$$

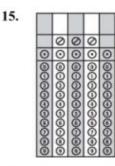
$$J \frac{56}{56} = \frac{14x}{56}$$



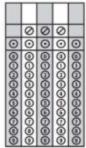
Part 2: Gridded Response

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. Find the measure of \overline{QR} if Q is between points P and R, PR = 42, PQ = 8x, and QR = 4x. (Lesson 1-2)
- 16. Use the Distance Formula to find the distance, in units, between H(4, -1) and K(-8, 4). (Lesson 1-3)



16.

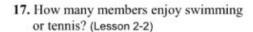


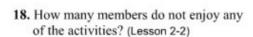
2 Standardized Test Practice (continued)

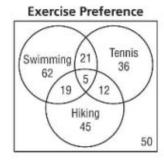
Part 3: Short Response

Instructions: Write your answer in the space provided.

For Exercises 17 and 18, refer to the Venn diagram that shows results of a survey of 250 members of a local health club.





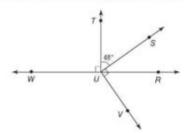


17.____

The owner of Pop's Pizza and Games says that to win the radio/CD player, you must first win 4500 credits. Each time you play the Racetrack game, you win 30 credits. How many times must you play the Racetrack game to win enough credits for the radio/CD player? (Lesson 2-4)

20. If B is in the interior of $\angle DEF$, $m \angle DEB = 27.2$, and $m \angle DEF = 92.5$, find m∠BEF. (Lesson 2-7)

21. Refer to the following figure to answer the questions below. (Lesson 2-8)



a. Name a pair of supplementary angles.

b. Name a pair of complementary angles.

21b.

c. Find m∠RUV.