Willard Middle School – Mathematics

SUMMATIVE TEST – Power Standard 7:9

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour \_\_\_\_\_\_\_\_\_\_

1. Use a protractor to measure **∠ A** within +/-3°.

A

 2. Use a protractor to measure **∠ B** within +/-3°.

 

B

3. Classify **∠ C**.

C

4. The measure of the reflex of a 90˚ angle is:

1. 0˚
2. 90˚
3. 180˚
4. 270˚

5. Triangle JKL is similar to Triangle MNO. $\overbar{JK}$ is 7 ft. long, $\overbar{KL}$ is 9 ft. long, and

 $\overbar{MN}$ is 49 ft. long? How long is $\overbar{NO}$?

1. 45 feet
2. 49 feet
3. 63 feet
4. 72 feet

6. Find the value of x in the following pair of similar figures.

 21 ft 7 ft

 10 ft

 x

7. Find the value of x in the following pair of similar figures.

 3.6 mm 5.1 mm 10.8 mm x

8. The ratios of square *H’s* length to square *I’s* length is 3:5. If the length of square

 *H* is 18 meters, what is the perimeter of square *I?*

9. Suppose you are 6 feet tall and you cast a shadow 5 feet long. Find the height of a

 tree if it casts a shadow 40 feet long.

10. Stanley is 6 ft. tall. He wants to stand in the shade of a tree that is 35 ft. tall. If

 the tree casts a 10 ft. shadow, what is the farthest Stanley can stand from the tree

 and completely be in tree’s shadow and in none of his own shadow? Round your

 answer to the nearest tenth, if necessary.