TEST NAME: Geometry EOG Stations Review TEST ID: 2476016 GRADE: 08 - Eighth Grade SUBJECT: Mathematics TEST CATEGORY: My Classroom



Student:	
Class:	
Date:	

- 1. The vertices of  $\triangle JKL$  have the following coordinates: J(1, 0), K(3, 4), L(1, 4). If  $\triangle JKL$  is reflected over the *x*-axis, what are the new coordinates for Vertex *L*?
  - A (1,-4)
  - B. (-1, 4)
  - C. (-1,-4)
  - D. (1, 4)
- 2. A square is dilated about the origin by a scale factor of 3.5.



# What is a true statement about the dilation as compared to the original square?

- A One of its vertices is located at (7, 0).
- B. The perimeter is 7 times the perimeter of the original square.
- C. The area is 3.5 times greater than the area of the original square.
- D. The measure of each angle of the dilated figure is larger by a factor of 3.5.



3. Maple Street and Elm Street are parallel to each other and both intersect Arbor Street.



### Which statement is NOT true?

- A  $m \angle 1 = m \angle 5$ B.  $m \angle 3 = m \angle 6$
- B.  $m \angle 3 = m \angle 6$
- C.  $m \angle 2 = 80^{\circ}$
- D.  $m \angle 4 = 80^{\circ}$
- <sup>4.</sup> Right triangle *JKL* is shown below.



# What is the measure of $\angle KLM$ ?

- A 120°
- <sup>B.</sup> 126°
- c. 135°
- D. 144°



<sup>5.</sup> Triangle *PQR* is shown below.



What is the measure of  $\angle QRS$ ?

- A 76°
- <sup>B.</sup> 104°
- C. 118°
- D. 138°
- 6. What is the length of  $\frac{1}{XZ}$ ?



- A 7 inches
- B. 13 inches
- C. 17 inches
- D. 25 inches



<sup>7.</sup> In the picture below, an airplane is 40 miles (air distance) from the airport and is at an elevation of 4 miles.



What is the *approximate* ground distance (d) the airplane is from the airport?

- <sup>A</sup> 20.4 mi
- <sup>B.</sup> 36.0 mi
- c. 39.8 mi
- <sup>D.</sup> 44.0 mi
- 8. Which of the following could be the lengths of the sides of a right triangle?
  - A 5.1 cm, 3.4 cm, 8.5 cm
  - B. 5.1 cm, 6.8 cm, 8.5 cm
  - C. 5.1 cm, 8.5 cm, 8.5 cm
  - D. 5.1 cm, 6.8 cm, 10.2 cm
- <sup>9.</sup> Mr. Lopez has a rectangular classroom that measures 36 feet by 28 feet. What is the *approximate* diagonal measurement of the room?
  - A 23 feet
  - B. 44 feet
  - C. 46 feet



 $^{10.}$  In triangle WXY below, XY measures 16 cm, YZ measures 4 cm, and WX measures 13 cm.



What is the area of triangle WXY?

- <sup>A</sup> 40 cm<sup>2</sup>
- <sup>B.</sup> 60 cm<sup>2</sup>
- <sup>C.</sup> 80 cm<sup>2</sup>
- D. 100 cm<sup>2</sup>



### <sup>11.</sup> Point *A* and Point *B* are graphed on the grid below.



### What is the distance between Point A and Point B, in units?

- A 8 units
- B. 10 units
- C. 11 units
- D. 14 units



<sup>12</sup>. David departs from his home and travels directly to a flower shop and then directly to school. The locations are shown on the grid below, where each unit represents 1 mile.



#### What is the shortest distance between the flower shop and the school?

- A. 5 miles
- B. 12 miles
- C. 13 miles
- D. 18 miles

#### 13. What is the volume of this figure, in cubic centimeters?



- A. 9π
- B. 18π
- C. 27π
- D. 36π



<sup>14.</sup> What is the *approximate* volume of the cone below?



- <sup>A</sup> 70 cm<sup>3</sup>
- <sup>B.</sup> 183 cm<sup>3</sup>
- <sup>C.</sup> 549 cm<sup>3</sup>
- D. 733 cm<sup>3</sup>
- <sup>15.</sup> A soccer ball has a radius of 11 cm. Using  $\pi \approx 3.14$ , what is the approximate volume of the soccer ball in cubic centimeters?
  - A 1520
  - B. 3135
  - C. 4772
  - D. 5572

