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

Student:
Class:
Date:

1. The vertices of $\triangle J K L$ have the following coordinates: $J(\mathbf{1}, \mathbf{0}), K(\mathbf{3}, \mathbf{4}), \boldsymbol{L}(\mathbf{1}, \mathbf{4})$. If $\triangle J K L$ is reflected over the $\boldsymbol{x}$-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 $\mathbf{3 . 5}$.


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. $m \angle 3=m \angle 6$
C. $m \angle 2=80^{\circ}$
D. $m \angle 4=80^{\circ}$
4. Right triangle $J K L$ is shown below.


What is the measure of $\angle K L M$ ?
A $120^{\circ}$
B. $126^{\circ}$
C. $135^{\circ}$
D. $144^{\circ}$
5. Triangle $P Q R$ is shown below.


What is the measure of $\angle Q R S$ ?
A $76^{\circ}$
B. $104^{\circ}$
C. $118^{\circ}$
D. $138^{\circ}$
6. What is the length of $\overline{X Z}$ ?


A 7 inches
B. 13 inches
C. 17 inches
D. 25 inches
7. 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?
A $\quad 20.4 \mathrm{mi}$
B. $\quad 36.0 \mathrm{mi}$
C. 39.8 mi
D. 44.0 mi
8. Which of the following could be the lengths of the sides of a right triangle?

A $5.1 \mathrm{~cm}, 3.4 \mathrm{~cm}, 8.5 \mathrm{~cm}$
B. $5.1 \mathrm{~cm}, 6.8 \mathrm{~cm}, 8.5 \mathrm{~cm}$
C. $5.1 \mathrm{~cm}, 8.5 \mathrm{~cm}, 8.5 \mathrm{~cm}$
D. $5.1 \mathrm{~cm}, 6.8 \mathrm{~cm}, 10.2 \mathrm{~cm}$
9. 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 $W X Y$ below, $X Y$ measures $16 \mathrm{~cm}, Y Z$ measures 4 cm , and $W X$ measures 13 cm .


What is the area of triangle $W X Y$ ?
A $40 \mathrm{~cm}^{2}$
B. $60 \mathrm{~cm}^{2}$
C. $80 \mathrm{~cm}^{2}$
D. $100 \mathrm{~cm}^{2}$
11. Point $\boldsymbol{A}$ and Point $\boldsymbol{B}$ 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
12. 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 $9 \pi$
B. $18 \pi$
C. $27 \pi$
D. $36 \pi$
14. What is the approximate volume of the cone below?


A $70 \mathrm{~cm}^{3}$
B. $183 \mathrm{~cm}^{3}$
C. $549 \mathrm{~cm}^{3}$
D. $733 \mathrm{~cm}^{3}$
15. 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

