

Grading Period 3 Test

Name _____

- 1) Earl is on a low carbohydrate diet that only allows for 20,000 milligrams of carbohydrates per day. However, last night he splurged and ate 6 slices of pizza for dinner. Each piece of pizza has 36 grams of carbohydrates. By how many grams did he exceed the recommended amount of carbohydrates on his diet?
 - a) 120 g
 - b) 196 g
 - c) 216 g
 - d) 236 g

- 2) Which set of numbers contains the measurements of the sides of a right triangle?
 - a) 1, 2, 3
 - b) 5, 7, 8
 - c) 12, 16, 24
 - d) 9, 40, 41

- 3) Give the circumference of a circle with radius of 7 cm.
 - a) 10.99 cm
 - b) 21.98 cm
 - c) 43.96 cm
 - d) 153.86 cm

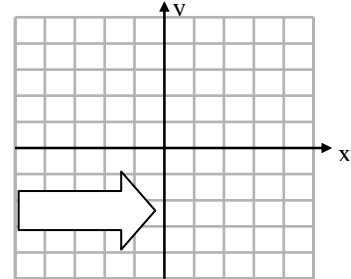
- 4) Two angles of a triangle have measures of 42° and 58°. Which of these best describes the sum of the two measures?
 - a) Acute
 - b) Right
 - c) Obtuse
 - d) Straight

- 5) Which of the following justifies that two figures are congruent?
 - a) The figures have the same shape and the same size.
 - b) The figures have the same number of angles.
 - c) The figures have the same shape.
 - d) The figures have the same size.

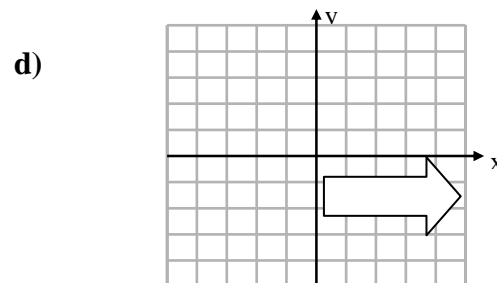
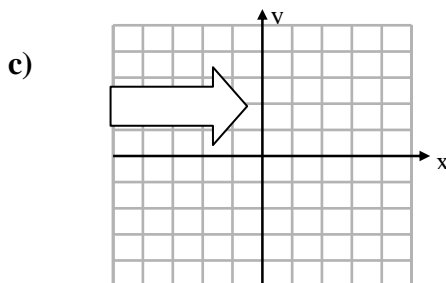
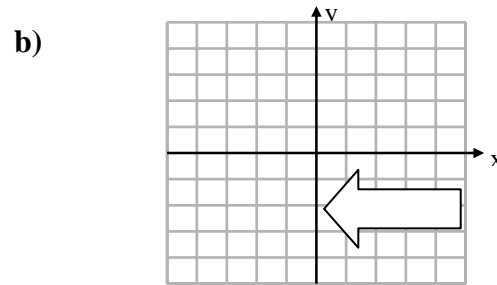
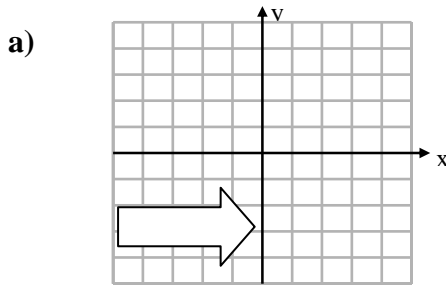
- 6) Sara is drawing a model of a room that has a length of 15 feet and a width of 11 feet. On her drawing, the width is represented by a segment 2.5 inches long. Which of the following is **not** a proportion that can be used to find the length?
 - a) $\frac{11}{2.5} = \frac{15}{x}$
 - b) $\frac{11}{15} = \frac{x}{2.5}$
 - c) $\frac{15}{11} = \frac{x}{2.5}$
 - d) $\frac{2.5}{11} = \frac{x}{15}$

- 7) What properties describe a rectangular prism?
- 3 faces, 8 vertices, and 9 edges
 - 3 faces, 3 vertices, and 12 edges
 - 6 faces, 3 vertices, and 9 edges
 - 6 faces, 8 vertices, and 12 edges

Use the following figure to answer question 8.



- 8) Which of the following is a graph of the arrow reflected about the y-axis?

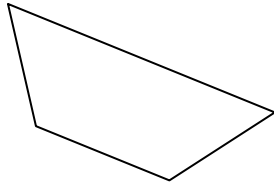


- 9) Which of these has 5 faces?
- Square-based pyramid
 - Rectangular prism
 - Pentagon-based pyramid
 - Cube
- 10) Convert 4 yards, 7 feet to inches.
- 47 inches
 - 144 inches
 - 228 inches
 - 286 inches

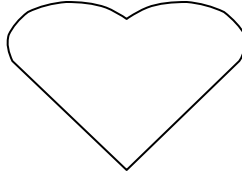
11) What properties describe a rectangular-based pyramid?

- a) 1 rectangular face, 4 triangular faces, 5 vertices, 8 edges
- b) 4 rectangular faces, 1 triangular face, 4 vertices, 5 edges
- c) 5 triangular faces, 5 vertices, 8 edges
- d) 5 rectangular faces, 5 vertices, 5 edges

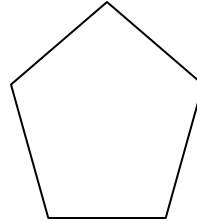
12) Which of the following figures has line symmetry?



I



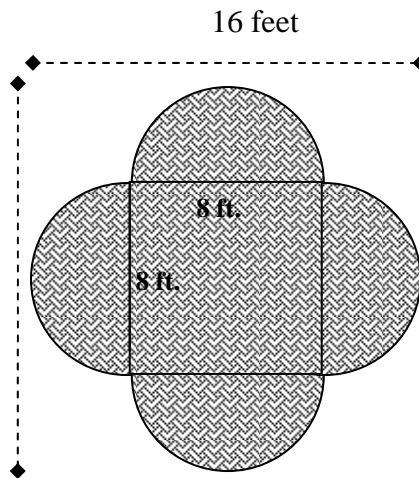
II



III

- a) I and III only
- b) II only
- c) I and II only
- d) I, II, and III

13) Maria designed the rug below. The semicircles are the same size and the enclosed quadrilateral is a square with sides that measure 8 feet. If the width and length of the entire figure is 16 feet, what is the area of the unusual rug?

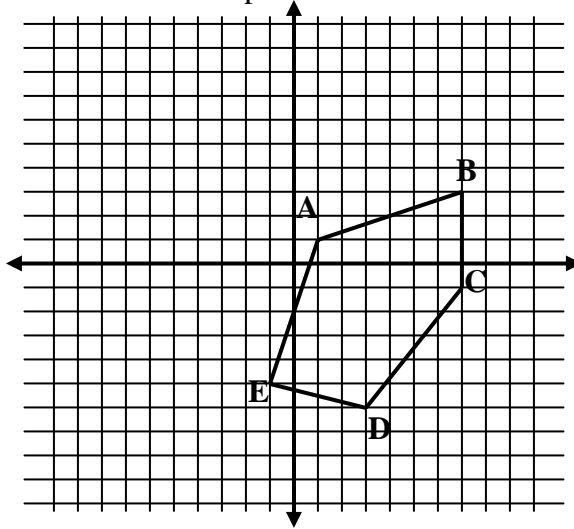


- a) 164.48 ft^2
- b) 256 ft^2
- c) 465.92 ft^2
- d) 867.84 ft^2

14) What happens to the perimeter of a square when we double the length of its sides?

- a) It doubles.
- b) It quadruples.
- c) It doesn't change.
- d) There is no pattern.

15) Using the coordinate axis shown below, a student was told to draw a new graph by moving the figure to the left 5 units and up 1 unit. Determine the new vertices of the new figure.



- a) A'(-4, -2); B'(2, 4); C'(2, 0); D'(-2, 5); E'(6, 4)
- b) A'(-4, 2); B'(2, 4); C'(2, 0); D'(-2, -5); E'(-6, -4)
- c) A'(-4, -2); B'(-2, -4); C'(2, 0); D'(2, 5); E'(6, 4)
- d) A'(-4, 2); B'(2, 4); C'(-2, 0); D'(-2, 5); E'(-6, 4)

16) Three congruent angles form a straight angle. What is the measure of the three angles?

- a) 30° , 30° , 30°
- b) 45° , 45° , 45°
- c) 60° , 60° , 60°
- d) 120° , 120° , 120°

17) Using a map with a scale of 1 inch = $\frac{1}{2}$ mile, how far must the school bus travel from the school to the city park if the distance measures $8\frac{1}{2}$ inches on the map?

- a) $4\frac{1}{4}$ miles
- b) $4\frac{1}{3}$ miles
- c) $4\frac{1}{2}$ miles
- d) $4\frac{3}{4}$ miles

18) Which formula exhibits the Pythagorean Theorem for a right triangle with c representing the hypotenuse and the legs represented by a and b ?

- a) $a + b = c^2$
- b) $a^2 + b^2 = c^2$
- c) $a^2 + b^2 + c^2 = 360$
- d) $a + b = c$

19) What type of three-dimensional figure is composed of six squares?

- a) Square-based pyramid
- b) Hexagonal pyramid
- c) Rectangular-based pyramid
- d) Cube

20) Which answer choice represents the number of obtuse angles in the polygon below?



- a) 1
- b) 2
- c) 3
- d) 5

21) On a map, 2 inches equals 750 miles. How many inches would represent 675 miles?

- a) $1\frac{1}{4}$ inches
- b) $1\frac{1}{2}$ inches
- c) $1\frac{3}{4}$ inches
- d) $1\frac{4}{5}$ inches

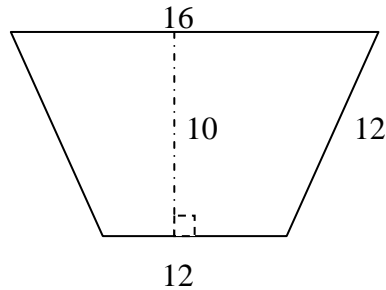
22) Which is true for two congruent hexagons?

- I. They have the same perimeter.
 - II. They both have five sides.
 - III. They both have the same area.
- a) I and II
 - b) II and III
 - c) I and III
 - d) I, II, and III

23) Which of the following best describes a prism?

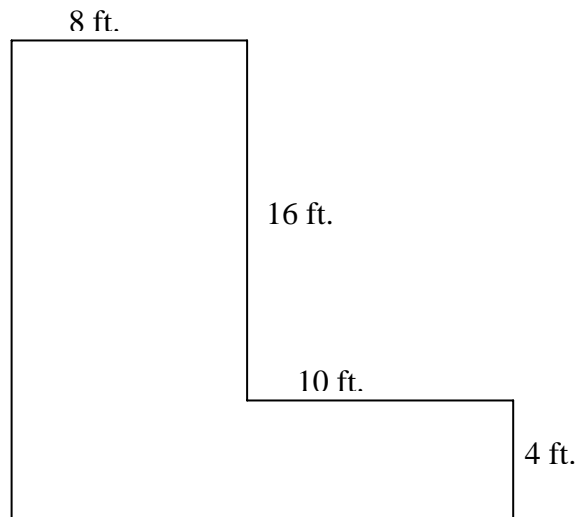
- a) A prism is composed of two bases and a number of rectangles equal to the number of sides of the base.
- b) A prism is composed of one base and a number of triangles equal to the number of sides of the base.
- c) A prism is composed of two bases that will always be circles.
- d) A prism is composed of one base and contains only one vertex.

24) What is the area of the trapezoid?



- a) 140 sq units
- b) 280 sq units
- c) 770 sq units
- d) 1,440 sq units

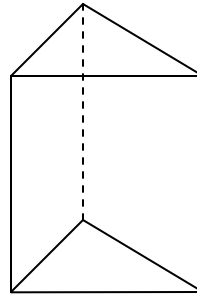
25) The school is rebuilding the fence for the playground. The playground is in an L-shape as shown in the figure below. How many feet of fence does the school need to buy?



- a) 38 feet
- b) 58 feet
- c) 68 feet
- d) 76 feet

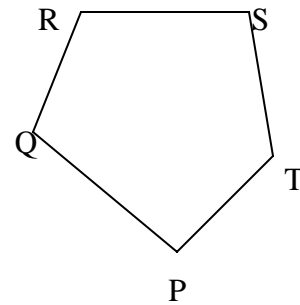
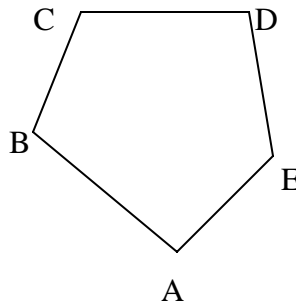
26) In the three-dimensional figure shown below, what type of polygons represent the faces?

- a) Triangles
- b) Rectangles
- c) Segments
- d) Vertices



27) The two pentagons below are congruent. Which of the following is true?

- a) $\overline{CD} \cong \overline{SR}$
- b) $\overline{ED} \cong \overline{ST}$
- c) $\overline{BA} \cong \overline{QP}$
- d) $\overline{EA} \cong \overline{PT}$



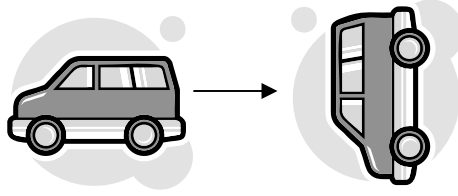
28) Janice is making punch with 3 gallons of lemonade and 2 quarts of grape juice. How many cups of punch can be made from the recipe?

- a) 5 cups
- b) 20 cups
- c) 44 cups
- d) 56 cups

29) Which of the following does **not** represent a Pythagorean triple?

- a) 6, 15, 17
- b) 6, 8, 10
- c) 7, 24, 25
- d) 9, 40, 41

30) Which transformation was performed on the picture below?



- a) Translated
- b) Rotated
- c) Reflected
- d) Randomized

Answer Key
Grading Period 3 Test

- | | | |
|-------|------|-------|
| 1) b | M.4a | DOK 2 |
| 2) d | G.3e | DOK 2 |
| 3) c | M.4b | DOK 2 |
| 4) c | G.3f | DOK 2 |
| 5) a | G.3c | DOK 2 |
| 6) b | M.4d | DOK 2 |
| 7) d | G.3a | DOK 1 |
| 8) b | G.3d | DOK 2 |
| 9) a | G.3b | DOK 1 |
| 10) c | M.4a | DOK 1 |
| 11) a | G.3a | DOK 1 |
| 12) d | G.3c | DOK 1 |
| 13) a | M.4b | DOK 2 |
| 14) a | M.4b | DOK 2 |
| 15) b | G.3d | DOK 2 |
| 16) c | G.3f | DOK 2 |
| 17) a | M.4d | DOK 2 |
| 18) b | G.3e | DOK 2 |
| 19) d | G.3b | DOK 2 |
| 20) b | G.3f | DOK 2 |
| 21) d | M.4d | DOK 2 |
| 22) c | G.3c | DOK 2 |
| 23) a | G.3b | DOK 2 |
| 24) a | M.4b | DOK 2 |
| 25) d | M.4b | DOK 2 |
| 26) b | G.3a | DOK 1 |
| 27) c | G.3c | DOK 2 |
| 28) d | M.4a | DOK 2 |
| 29) a | G.3e | DOK 2 |
| 30) b | G.3d | DOK 1 |