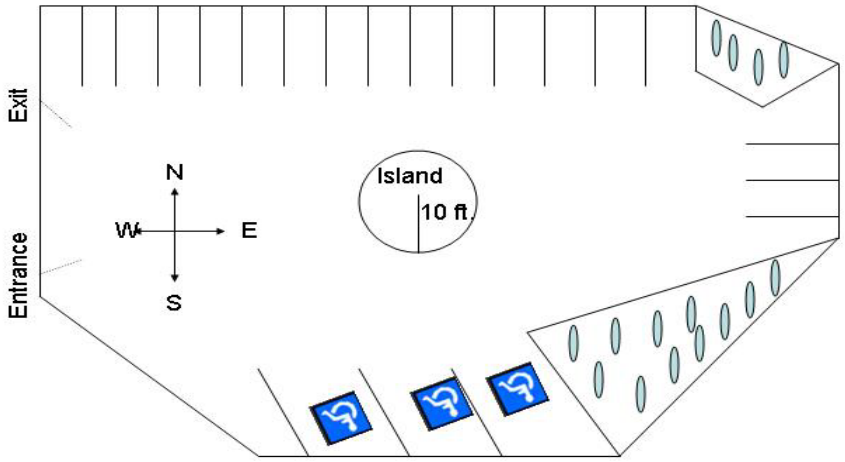
Use this diagram to answer questions 1 through 4.



1. A construction worker has been asked to paint "No Parking" signs along the curb of the island in 10 ft. increments. Which measurement is needed to determine how many signs to paint?

   a. Area
   b. Radius
   c. Diameter
   d. Circumference

2. Using the formula πr^2, given that the radius of the circle is 10 feet, what is the measurement of the circumference? ($\pi = 3.14$)

   a. 31.4 ft.
   b. 314 ft.
   c. 156 ft.
   d. 62.8 ft.

3. What kind of shape is formed by the planter in the NE corner?

   a. Hexagon
   b. Octagon
   c. Parallelogram
   d. Quadrilateral

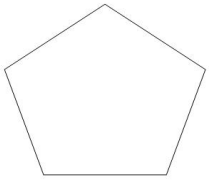
4. What kind of shape is formed by the entire parking lot?

   a. Hexagon
   b. Heptagon
   c. Octagon
   d. Quadrilateral

5. What kind of polygon does the picture at right depict?

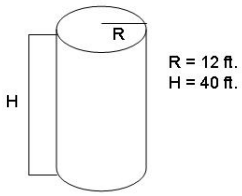
   a. Parallelogram
   b. Quadrilateral
   c. Rhombus
   d. Hexagon

6. What kind of polygon does the picture at right depict?



   a. Quadrilateral
   b. Pentagon
   c. Hexagon
   d. Heptagon

Use the drawing below to solve questions 7 and 8.



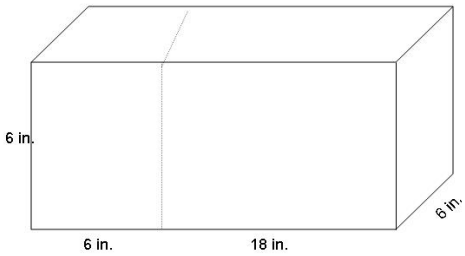
7. Using the formula for volume, $v = \pi r^2 h$, what is the maximum storage capacity of this grain silo? ($\pi = 3.14$)

   a. 452.16
   b. 18086.40
   c. 9043.20
   d. 960

8. Using the formula πr^2, what is the area of the silo?

   a. 452.16
   b. 960
   c. 226.08
   d. 75.30

Use this figure to answer questions 9 and 10.



9. What two solid figures will be formed after the carpenter cuts the piece of wood?

   a. Two cubes
   b. Two rectangular pyramids
   c. A cube and a rectangular prism
   d. A cube and rectangular pyramid

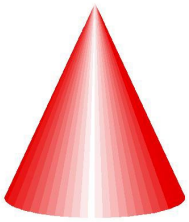
10. Using the formula L x W x H, what is the volume of the figure above?

    e. 864
    f. 144
    g. 432
    h. 648

Use the figures to answer the questions.

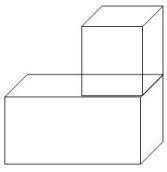
10. What kind of figure is shown at right?

    a. Cone
    b. Pyramid
    c. Rectangular prism
    d. Cube

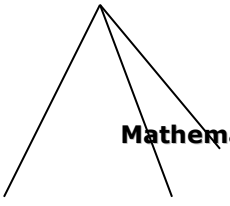


11. In the cube at right, approximately how much of the cube is missing?

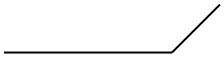
    a. 1/12
    b. 1/4
    c. 3/8
    d. 1/8



12. What kind of figure is shown at right?



a. Cone
b. Pyramid
c. Rectangular prism
d. Cube



14. What kind of polygon is the figure at right?

a. Quadrilateral
b. Trapezoid
c. Parallelogram
d. Pentagon

Answer Key

1. D
2. B
3. D
4. B
5. A
6. B
7. B
8. A
9. C
10. A
11. A
12. B
13. B
14. B