Module Test B

Module 13

**Circle the correct answer for each problem.**

1. What is the area of the parallelogram?

   15 cm   12 cm   30 cm
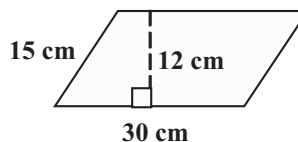
   a. 450 cm^2 b. 360 cm^2 c. 225 cm^2 d. 180 cm^2

2. A circle has an area of 5,024 square inches. Which is closest to the length of the diameter of the circle?

   a. 1,600 in.   b. 800 in.   c. 80 in.   d. 40 in.

3. The length of a rectangular field is twice its width. What is the perimeter of the field if the width of the field is 70 meters?

   a. 420 m   b. 350 m   c. 210 m   d. 105 m

4. To the nearest inch, what is the circumference of a circle whose radius is 3.5 inches?

   a. 11 in.   b. 22 in.   c. 38 in.   d. 44 in.

5. Which prism has a surface area of 150 square units?

   a.   6   5   5
   b.   5   6   6
   c.   6   6   6
   d.   5   5   5
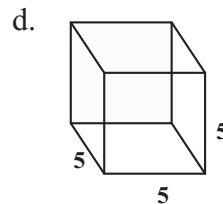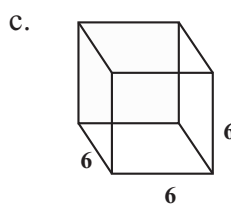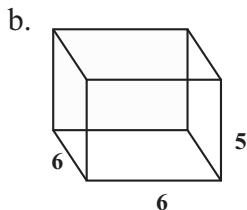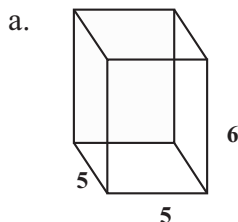
Fill in the blanks with one of the following words:

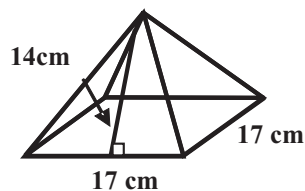square   cubic   triangle   trapezoid   height   slant height   lateral   surface

6. To find the area of a _____ , use the formula $A = \frac{1}{2}bh$.

7. It *is* necessary to find the area of a circle when finding the _____ area of a cone.

8. The _____ of a pyramid is the length of the segment joining the vertex of the pyramid to an edge of the base of the pyramid at a right angle.

9. For a plane figure whose dimensions are given in millimeters, the surface area of the figure is given in _____ millimeters.
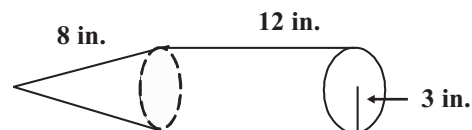
10. Find the area of the shaded region.

10 in.   7 in.

15 in.

24 in.
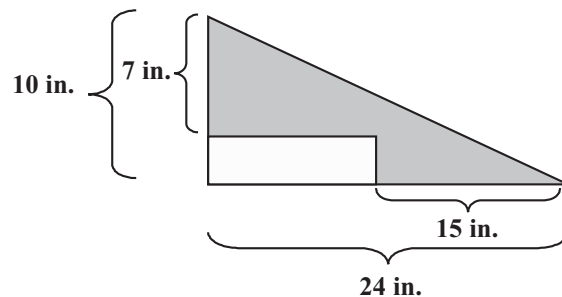
Find the surface area.

11.

14cm

17 cm

17 cm

12.

8 in.   12 in.

3 in.

Find the volume.

13.

24 yd

14.

15 in.

5 in.
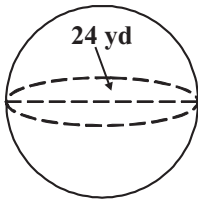
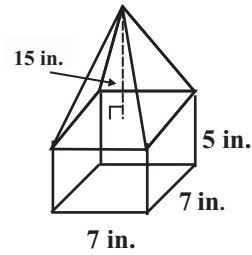7 in.

7 in.

15. The perimeter of a rectangle must be 22 feet. What whole-number dimensions will give the greatest area? Explain how you found your answer.

16. Show how to estimate the area of the shape at right. Each ☐ is 1 km^2.