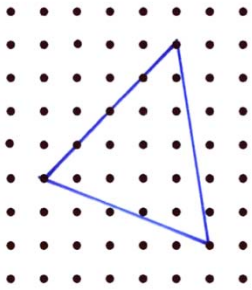1. Find the area and perimeter of this triangle.
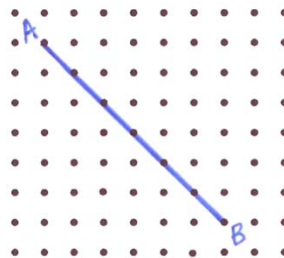   The horizontal and vertical distance between adjacent dots is 1 unit.
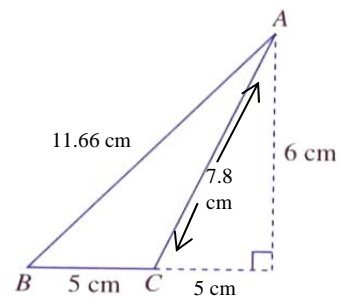
    Area = _____

2. What is the length of this segment? The horizontal and vertical distance between adjacent dots is 1 unit.

    Length = _____

3. Find the perimeter of triangle ABC.
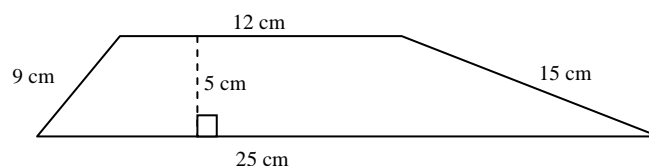   Perimeter = _____

    11.66 cm

    7.8 cm

    6 cm

    B   5 cm   C   5 cm

4. Find the area of triangle ABC above.
    Area = _____

5. Find the area of this polygon.
    Area = _____

    12 cm

    9 cm

    5 cm

    15 cm

    25 cm

6. A circular swimming pool of radius 4 m is surrounded by a path 1 m wide.
   (a) Find the circumference of the circle forming the outer edge of the path.

swimming pool
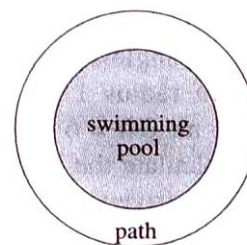
path

   (b) Find the area of the path.

7. The picture at the right is of a horse trough.
   It is open on the top so the horses can get to the water. It is made of galvanized steel.
   (a) Sketch a net that could be enlarged and used to
        create this trough.

45 cm
D 60 cm C
960 cm
47.4 cm
A ← → B
30 cm
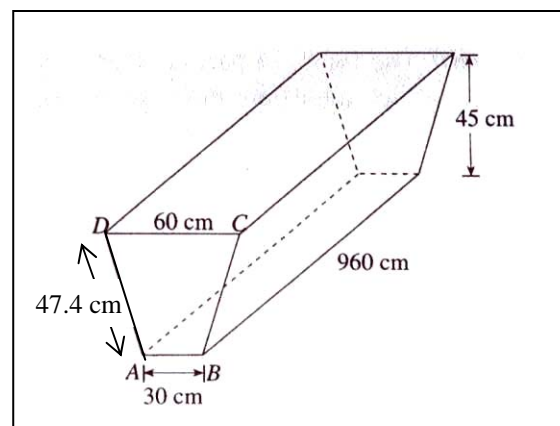
   (b) Find the surface area of the outside of the trough.

   (c) For what *real-life* question is the surface area the answer?

   (d) Find the volume of the trough.

   (e) For what *real-life* question is the volume the answer?

For each 3-D shape below (a) draw the net
(b) list the polygons and their areas (like we did on the box worksheet)
(c) compute the total surface area.

8. A rectangular prism has length 5 cm, width 2.5 cm, and height 10 cm.

9. A cylinder with radius = 8 cm and height = 10 cm.

10. A square pyramid with sides of the square measuring 7 inches and the slant-height (height of the triangular faces) measuring 6 inches.

11. A triangular prism with has right triangles with sides of 3 inches, 4 inches, and 5 inches and length of the prism 10 inches.

12. A hexagonal prism has bases that are regular hexagons, with each side length 10 cm. The area of one of the hexagons is 260 square centimeters. The height of the prism is 8.5 centimeters.

13. A cone is formed using a sector that is 2/5 of a circle having radius 10. (Note that the base circle must have circumference that is equal to the curved edge of the sector).

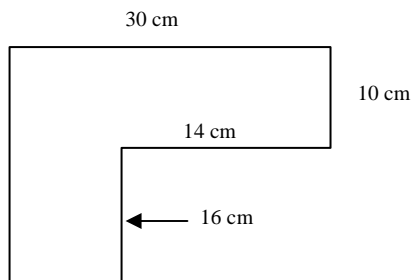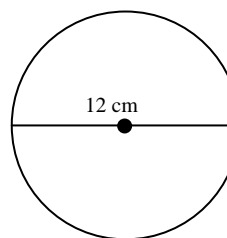14 -17. Find the area and the perimeter of each of the following figures.

16 inches

7 inches | 8 inches | 8 inches

8 inches

23 inches

13 inches | 2.5 inches

18 inches
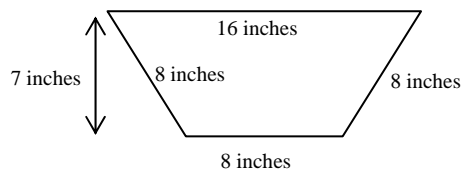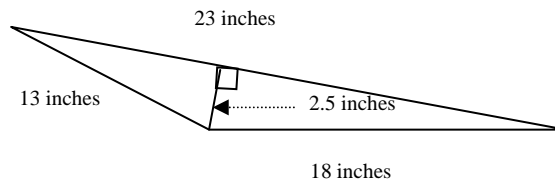
Area = _____

Perimeter = _____

Area = _____

Perimeter = _____

30 cm

10 cm

14 cm

16 cm

12 cm

Area = _____

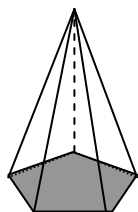Perimeter =_____

Area = _____
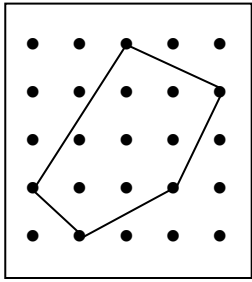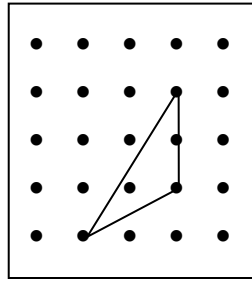
Circumference = _____

18.

The specific name for this polyhedron is _____.
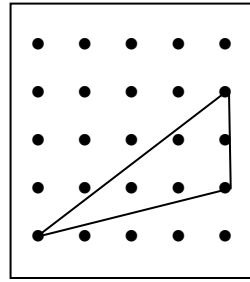
Draw a net for this polyhedron:

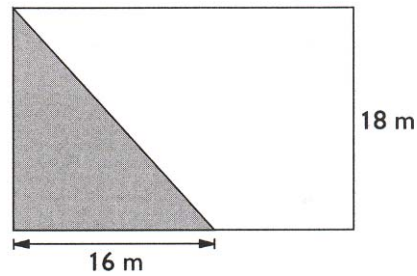19. Find the area for each of the following polygons.

Area = _____

Area = _____

Area = _____

20.

The area of the shaded part is $\frac{1}{3}$ of the area of the rectangle. Find the area of the rectangle.

18 m

16 m

21. This figure is made up of two semicircles and a quarter circle. Find the area and perimeter. Leave your answers in terms of π

2 m   2 m