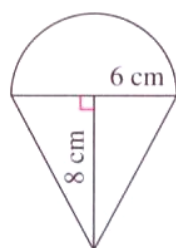1. Find the perimeter and the area of the following figures. Leave answers as exact values.
   If there is a shaded region, find the perimeter and area of the shaded region only.
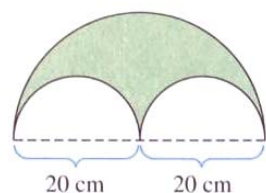
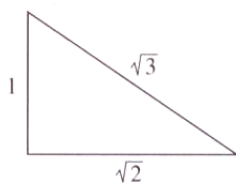   a.   Perimeter = _____

            Area = _____

6 cm

8 cm

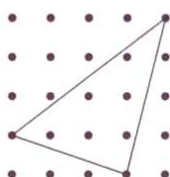   b.   Perimeter = _____

            Area = _____

20 cm   20 cm

2. Determine whether each of the following is a right triangle.
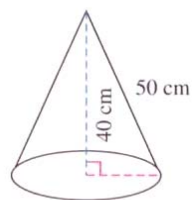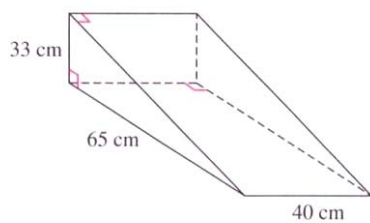   Show your work and state how you know.

    a.

$\sqrt{3}$

1

$\sqrt{2}$

    b.

3. Find the volume of each of the following.

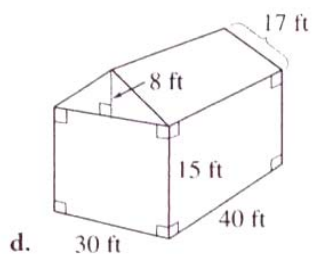a. _____

40 cm   50 cm

a. Right circular cone

b. _____

33 cm

65 cm

40 cm

b. Right triangular prism

c. _____

3 cm

5 cm

8 cm
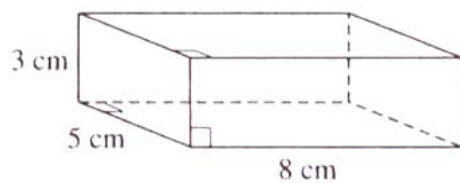
c. Right rectangular prism

d. _____

17 ft

8 ft

15 ft

40 ft

d.   30 ft

4. Draw a <u>net</u> that would produce this box. Then find the <u>total surface area</u> of this box.
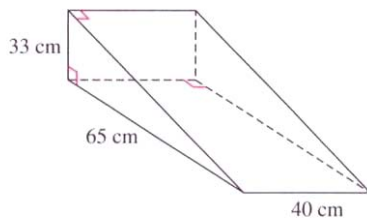
NET

3 cm

5 cm

8 cm
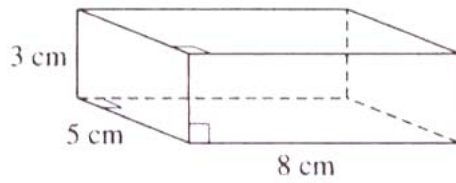
. Right rectangular prism

Total surface Area of box = _____

5. Draw a <u>net</u> that would produce this ramp. Then find the <u>total surface area</u> for this ramp.
   <u>DO NOT include the bottom the ramp</u> in either the net or the total surface area. This ramp is
   hollow and does not have a bottom. It just sits on the ground.

NET

33 cm

65 cm

40 cm

Right triangular prism

Total Surface Area of ramp = _____

6 . Draw a <u>net</u> that would produce this barn-shape and then find the <u>total surface area</u> of this barn.

  The barn is made of wood and has a wooden floor, so <u>include the floor</u> in the net <u>and</u>
  in the surface area.

NET

17 ft

8 ft

15 ft

40 ft

30 ft