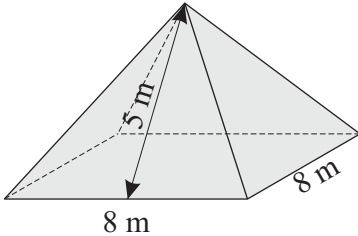


Name: \_\_\_\_\_

1. Find the total surface area of this pyramid.


 m<sup>2</sup>

2. The surface area (SA) of a sphere (ball) is given by the formula

$$SA = 4\pi r^2$$

where  $r$  is the **radius** of the sphere.

Find the surface area of a basketball if the **diameter** of a basketball is 24 centimetres. Give answer correct to **one** decimal place.

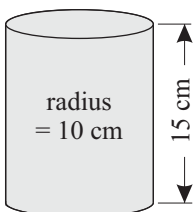
 cm<sup>2</sup>

3. The total surface area of a cylinder is given by the formula

$$SA = 2\pi r(r + h)$$

where  $r$  = radius and  $h$  = height.

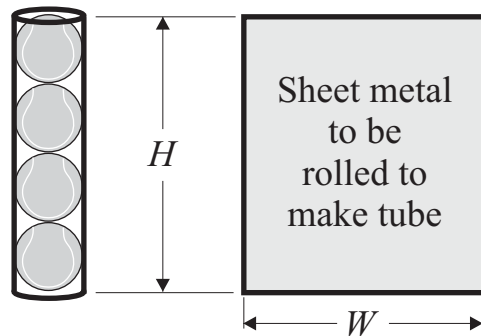
Find the total surface area of this cylinder. Give answer correct to **one** decimal place.


 cm<sup>2</sup>

4. A tube is to be made to hold 4 tennis balls as shown.

(a) Find the dimensions of the piece of sheet metal required to make the **curved** part of this tube if the **radius** of a tennis ball is 32 mm.

Give answers to the nearest whole number.



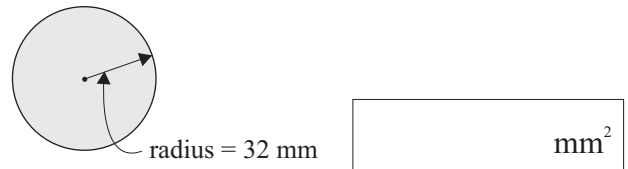
$H =$   mm

$W =$   mm

(b) Find the area of this piece of sheet metal.

 mm<sup>2</sup>

(c) Find the **area** of the top of this tube. Give answers to the nearest whole number.


 mm<sup>2</sup>

(d) Find the **total surface area** of this container.

 mm<sup>2</sup>