

**ASSIGNMENT: Surface Area of Cylinders
and Spheres**

Name: _____

Date: _____

Round all answers to the nearest hundredth.

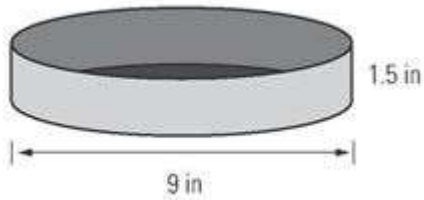
1. Find the surface area of a cylindrical tank that has a radius of 1.5 m and a height of 5 m.

2. Find the surface area of a pipe that has a diameter of 4.5 cm and is 18.8 cm long (note: the ends of the pipe are open).

3. Find the surface area of a sphere with a radius of 1.3 m.

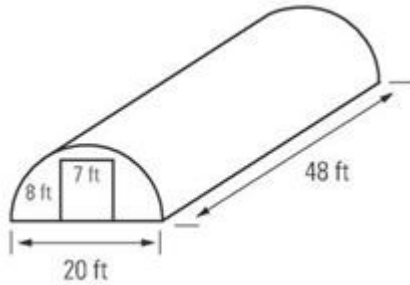
4. A tennis ball has a diameter of 6.7cm. What is its surface area?

5. Bob is a metal worker making round cake pans. How much metal will he use in making a 9-inch round cake tin that is $1\frac{1}{2}$ inches tall?

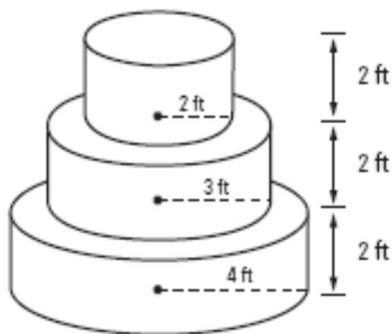


6. Find the surface area of a solid hemisphere (half a sphere) with a radius of 18.5 cm (note: include the flat side).

7. How much corrugated steel will be needed to cover a Quonset hut (a kind of building that is half a cylinder) that is 20 feet wide by 48 feet long if both the front and back are covered, except for a door that is 8 feet tall by 7 feet wide?



8. A wedding designer is making a cake for a wedding. The cake is composed of three cylinders with radii of 4 feet, 3 feet, and 2 feet stacked one on top of the other. Each has a height of 2 feet. A batch of icing will only cover 1 square foot. How many batches will he have to make to have enough icing to cover the cake?



1.	61.26 m ²
2.	265.78 cm ²
3.	21.24 m ²
4.	141.03 cm ²
5.	106.03 in ²
6.	3225.63 cm ²
7.	1766.12 ft ²
8.	164 batches