

Cylinder Problems

11.03

Solve each problem. Make a sketch where one is not provided. Watch the units. Write down the cylinder formulas below:

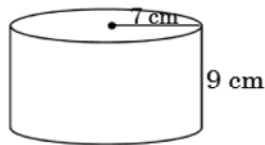
Volume = _____ Surface Area = _____

#1-4. Find volume and surface area.

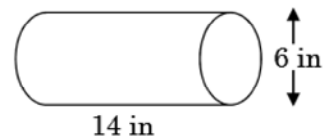
1. An oil can with a height 20 cm and a radius of 10 cm.

2. A water tank with a height of 5 feet and a diameter of 4 feet.

3.



4.



5. Find the volume of a 100-foot PVC pipe with a diameter of 1". Then find the number of gallons of water the pipe will hold if 1 gallon = 231 cu. in.

6. How tall must a cylindrical tank be in order to hold 3140 liters if the diameter of the tank is 200 cm. Hint: 1 liter = 1000 cu. cm.

7. If the tank in #6 is made from aluminum that costs \$1.00 for 100 sq. cm, find the cost of the tank without a top.

Scrambled answers: 88, 321, 4.1, 942, 6280, 704, 100, 1884, 942, 396, 63, 1385