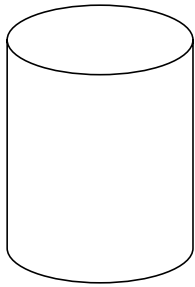


# Geometric Formulas: Cylinders



Cylinder

Dimensions: Numbers that describe the radius and height of a cylinder.

Surface Area: Total area of all the faces.

$$SA = \text{Area of Lateral Face} + \text{Area of Top} + \text{Area of Base} = B$$

$$SA = \frac{C \cdot h}{\pi \cdot d \cdot h} + \frac{\pi \cdot r \cdot r}{\pi \cdot r \cdot r} + \frac{\pi \cdot r \cdot r}{\pi \cdot r \cdot r}$$

$$SA = \frac{ph}{\text{Perimeter}} + \frac{2B}{\text{area of Base}}$$

Volume: Number of unit cubes needed to fill the cylinder.

$$V = Bh \leftarrow \text{height}$$

$$V = \pi \cdot r \cdot r \cdot h$$

