Cylinders:

A. Definitions

A <u>cylinder</u> is a 3-dimensional figure in which the 2 bases are identical circles.

B. Basic Memorizations

Surface Area = $2\pi rh + 2\pi r^2$

Volume = $\pi r^2 h$

C. Examples

Ex [1] Find the surface area of a cylinder with a radius of 3" and a height of 5".
_____ in^2

  a. The answer is $2\pi(3)(5) + 2\pi(3)^2 = 30\pi + 18\pi = 48\pi$

Ex [2] Find the volume of a cylinder with a radius of 5cm and a height of 2cm.
_____ cm^3

  a. The answer is $\pi(5)^2(2) = 50\pi$