[](http://www.google.ca/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=0ahUKEwjz9qCdzNLMAhUH5IMKHfvJCEwQjRwIBw&url=http://math.tutorvista.com/geometry/cylinder.html&bvm=bv.121658157,d.amc&psig=AFQjCNHlyDT9mXZgOauofPaQvAR8U7F7Pg&ust=1463075796111659)**Notes - Volume of Cylinder**

A cylinder is a 3-dimensional object with a net made of 2 circles and a curved rectangle.

In order to calculate the volume a cylinder, you will need to:

* Calculate the area of its base

(the base is a circle so, A = πr2)

* Multiply the base area (BA) by the height of the prism.

The formula for volume of a cylinder is:

**V =** πr2 **x h**

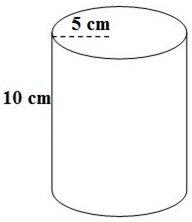
**V = area of circle x height of prism**

OR

*Volume is always expressed in* ***cubic units*** *because it is 3-dimensional. Ex. 10 cm3*

Example: Find the volume of this cylinder.

Show your work:

[](http://www.google.ca/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=0ahUKEwiD8NCOzdLMAhXL6oMKHeJgBSMQjRwIBw&url=http://www.mathatube.com/surface-area-of-cylinders.html&bvm=bv.121658157,d.amc&psig=AFQjCNHlyDT9mXZgOauofPaQvAR8U7F7Pg&ust=1463075796111659)

Formula: V = BA x h

V = πr2 x h

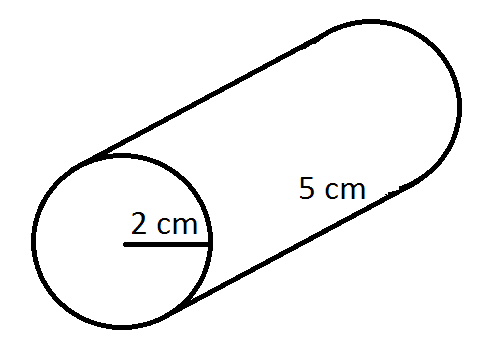
V = 3.14 x 52 x 10

V = 3.14 x 25 x 10

V = 785 cm3

Practice: Find the volume of this cylinder.

Show your work:

[](https://www.google.ca/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=0ahUKEwjxtLPfzdLMAhXly4MKHV4fBvYQjRwIBw&url=https://bakhmalamath9.wordpress.com/volume-of-three-dimensional-figures/&bvm=bv.121658157,d.amc&psig=AFQjCNGDLQEG-UOVGSjfUOWoKebbeMbGow&ust=1463076191371924)

Formula: