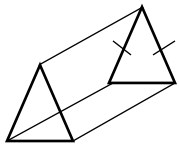**Warm Up**: Calculate the Volume and Surface area of an isosceles triangular prism. The base of the triangle is 19 cm, the height of the triangle is 24 cm and the height of the prism is 47 cm.   SA =
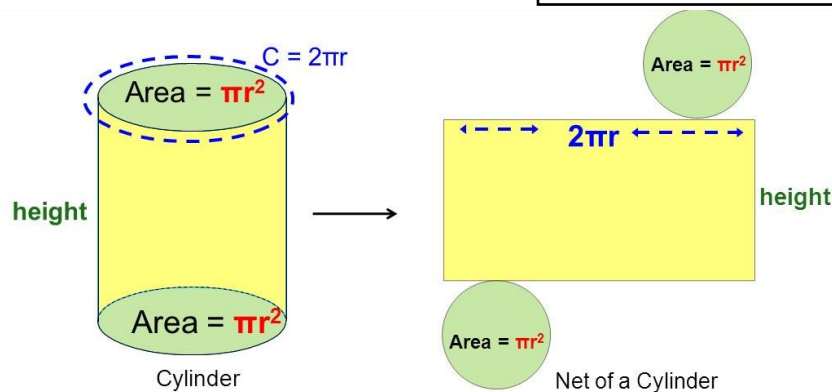
V=

Day 2: Volume and Surface Area of Cylinders

A *cylinder* is a three dimensional solid with identical parallel circular bases. The lateral surface is curved and extends from one base to the other base.

The volume of a cylinder is the same as a prism:

$V = A_{base} \times height$
or	$V =$

Cylinder   Net of a Cylinder

The net of a cylinder shows two circular bases and the lateral surface unfolds to reveal a simple rectangle.

The height of the rectangle is the height of the cylinder, while the length of the rectangle is the circumference of the circular base. Therefore,

$S.A._{cylinder} =$

Example 1: Calculate the volume and surface area of the following cylinder.

2.5 cm

72 mm
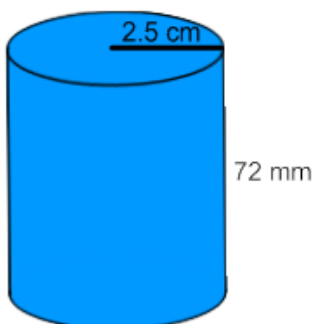
Example 2: A can of soup has a volume of 375 mL.
a) If the height of the can is 12 cm determine the radius of the can. (Note: 1 mL = 1cm^3)

b) How much paper is required to make the soup label?

Example 3: A roll of toilet paper has a height and diameter of 11.2cm. If the inner
cardboard roll is 4cm in diameter, what is the volume of toliet paper on
the roll?

Example 4: How much plastic would be required to package 12 toilet paper rolls
from example 3, if they are arranged in a 2 by 3 by 2 orientation?