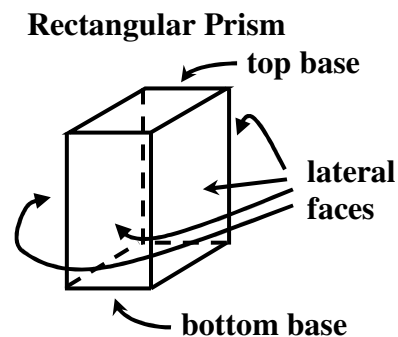


Section 11.2 – Surface Area of Prisms and Cylinders

A _____ is a 3-dimensional figure made of any number of polygons called _____.

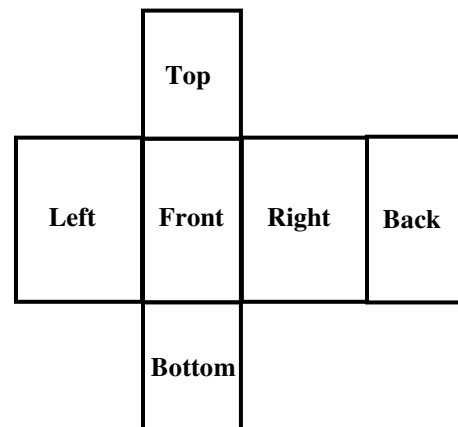
A _____ is a polyhedron with ___ congruent faces, called _____, which are located on the top and the bottom and they are _____. The other faces, which are around the prism, are called the _____ faces.



A prism is named according to the shape of its top and bottom base. Since the top and bottom base of the figure to the right is a rectangle, it is called a _____.

The _____ of a prism is the sum of the areas of all its faces.

The _____ of a prism is the sum of the areas of only its lateral faces.



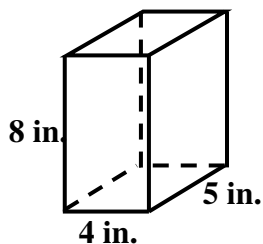
To determine the surface area of a prism it is sometimes easier to create a two-dimensional representation of all the faces, which is called a _____.

You can easily solve for the surface area of any figure by first determining the area of each face and then _____ them all up.

Ex 1:

Find the surface area of the prism.

Note: Notice that for a rectangular prism, the front face is the same as the back, the right is the same as the left, and the bottom is the same as the top.



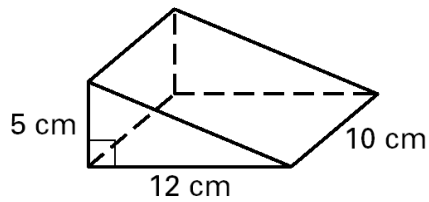
Front & Back	Left & Right	Bottom & Top	Surface Area
+	+	=	

Ex 2:

Find the surface area of the prism.

Note: This is not a rectangular prism, since there is not parallel bottom and top bases.

You can stand the figure up such that the triangles are parallel. Thus, this is a triangular prism.

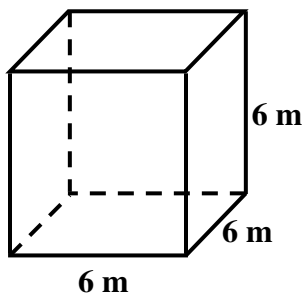


Bottom & Top	LF (Lateral Face) 1	LF 2	LF 3	Surface Area

Ex 3:

Find the lateral area of the prism. .

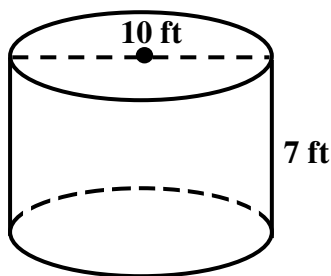
Note: If all the faces of a prism are squares, then it is called a cube.



Ex 4:

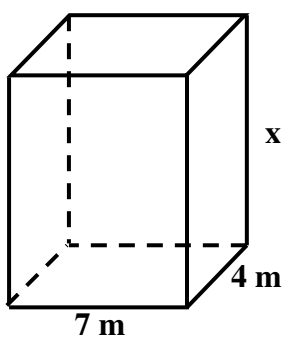
Find the surface area of the cylinder. Leave the answer in terms of π .

Note: Drawing a net for a cylinder will better help you understand how to find its surface area.



Ex 5:

Solve for the variable given the surface area of the rectangular prism.



$$S = 298 \text{ m}^2$$