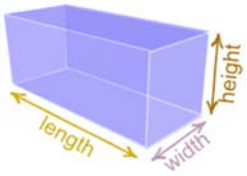
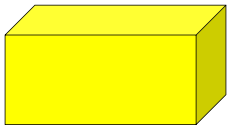
14.1

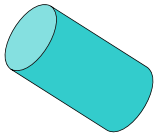
Surface Area of Prisms

What are three-dimensional figures?

A three-dimensional (3D) figure is an object that has _____, _____, and _____, which means that it can be measured in three directions.







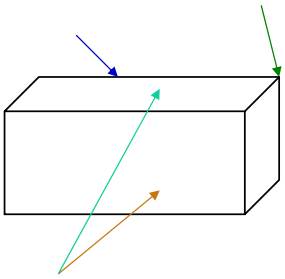
A three-dimensional figure encloses a part of _____; in other words it can hold something (water, air, etc.)

Features of a Three-Dimensional Figure

Face
the _____ surface of a figure

Edge
formed by two faces of a 3-D figure _____ a side

Vertex (plural: vertices)-
the _____ at which three or more edges meet



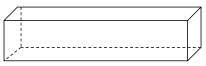
Two main types of Three-Dimensional Figures

Prism

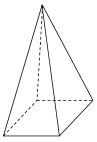
- Has at least three faces that are rectangles
- Has two congruent faces on the top and bottom called **bases**
- The shape of the base tells what type of prism the figure is

Pyramid

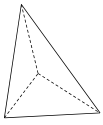
- Has at least three faces that are triangles
- Has only one base
- The shape of the base tells what type of pyramid the figure is



Rectangular Prism

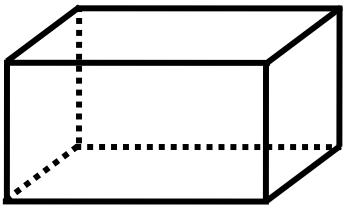


Rectangular Pyramid

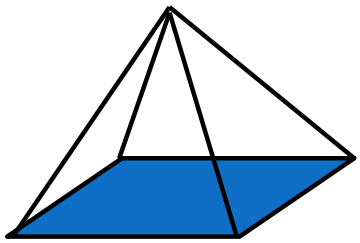


Triangular Pyramid

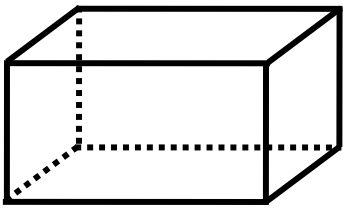
What's the name of this shape?
How many faces does it have?
How many edges does it have?
How many vertices does it have?



What's the name of this shape?
How many faces does it have?
How many edges does it have?
How many vertices does it have?

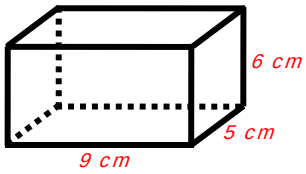


Surface area of a rectangular prism

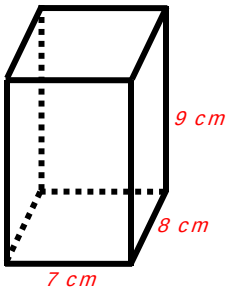


PRACTICE

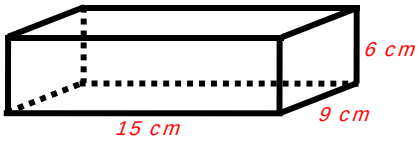
1) Find the surface area



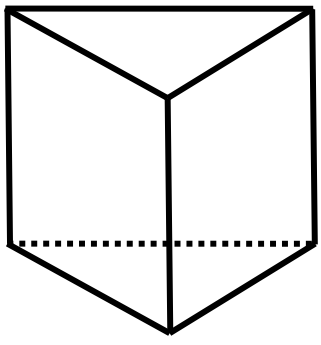
2) Find the surface area



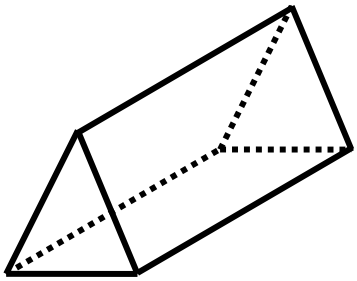
3) Find the surface area



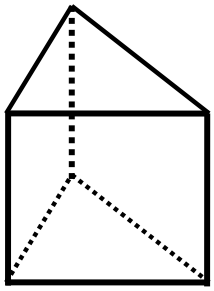
Surface area of a triangular prism



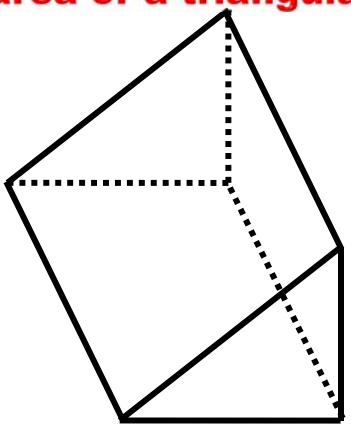
Surface area of a triangular prism



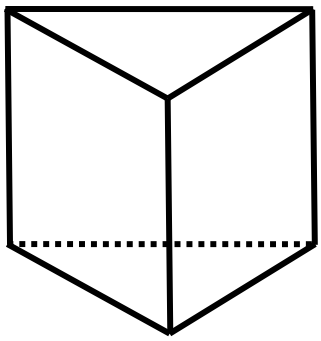
Surface area of a triangular prism



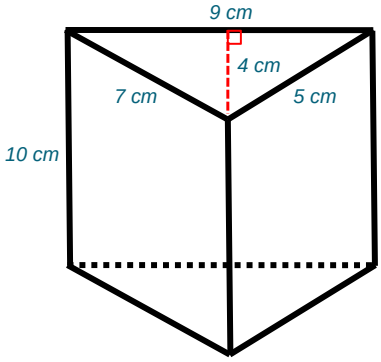
Surface area of a triangular prism



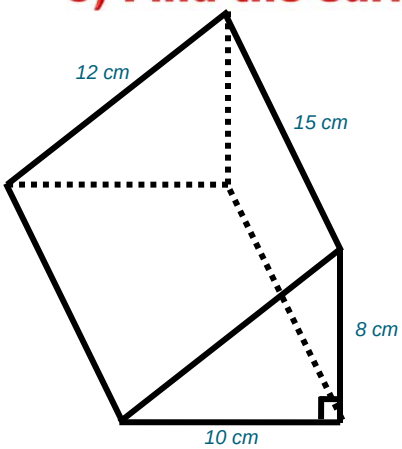
Surface area of a triangular prism



4) Find the surface area



5) Find the surface area



6) Find the surface area