

A prism is a three-dimensional shape whose ends are identical to its cross-section, so any slice cut parallel to the ends will be exactly the same shape.

Working out the volume of a prism is useful, for example knowing how much water is needed in a fish tank.

To calculate the volume of a prism, multiply the area of the cross section by the height.

The area of the cross section is the length times breadth.

You can also use the cross-section area, times the height, to find the volume of a cylinder.

The equation for this cylinder, is $V = \pi R^2 h$, because the cross section is a circle and the area of a circle can be found using πR^2 .

In this case πR^2 is three point one four times five times five.

Then multiply by H , which is 10.

The volume of the cylinder is 785 cubic centimetres.

So, the volume of a prism, or a cylinder, can be calculated in this way, no matter the shape.