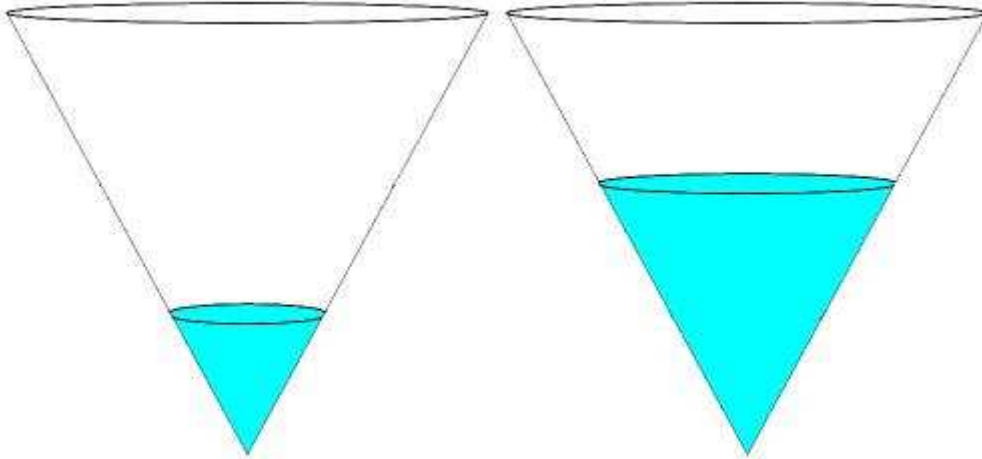


Fill Me Up Too

Imagine a cone sitting on its point being filled with water:



In the second picture, the height of the water level has doubled.
How has the volume of water changed?

What if the height had trebled?

What if the height had increased by a factor of n ?

How would I need to increase the height in order to double the volume?

How would I need to increase the height in order to treble the volume?

How would I need to increase the height in order to increase the volume by a factor of n ?

What would a graph of volume (y) against height (x) look like?

What would a graph of height (y) against volume (x) look like?

The Pint Glass is not a whole cone, it is a frustum.

How could you use the graph for a cone to work out what the graph for the Pint Glass would look like?