


Concept: Ratios for Area and Volume

Name: _____

COMPUTER COMPONENT

Instructions: In  follow the **Content Menu** path:
Measurement and Geometry > Ratios for Area and Volume



Work through all Sub Lessons of the following Lessons **in order**:


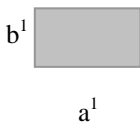
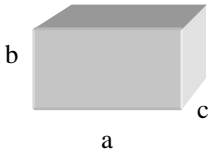
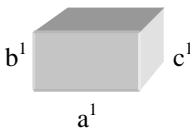
- *In This Topic*
- *Ratios*



As you work through the computer exercises, you will be prompted to make notes in your notebook/math journal.

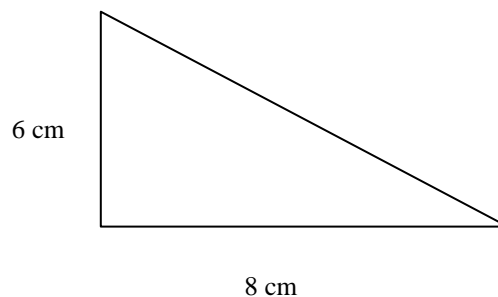
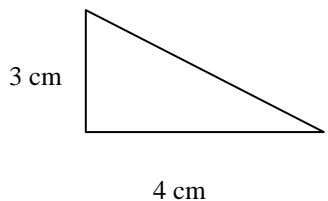
SUMMARY

1. The Patterns / the Rules: Record your observations for the on-computer exercises that you have just completed, in the spaces below.

AREA	VOLUME
 	 
Notes:	Notes:

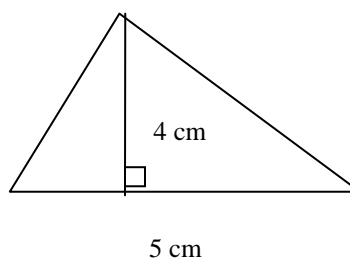
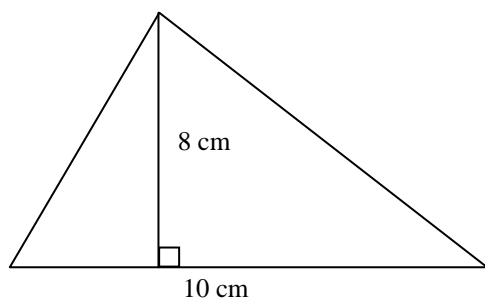
OFF COMPUTER EXERCISES:

1. Find the ratios of base: base, height : height, area : area for this pair of similar triangles:



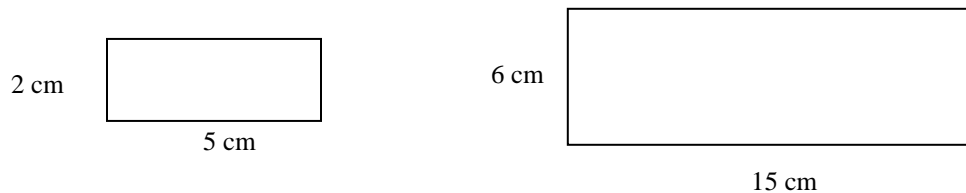
Shape	Base	Height	Area

2. Find the ratios of base : base, height : height, area : area for this pair of similar triangles:



Shape	Base	Height	Area

3. Find the ratios of length : length, width : width, area : area for this pair of similar rectangles:

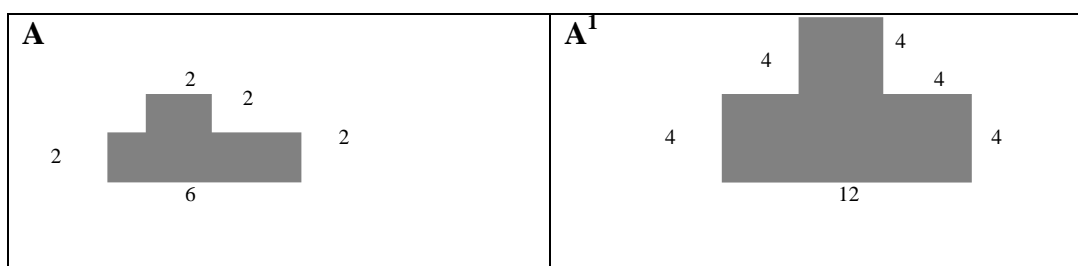



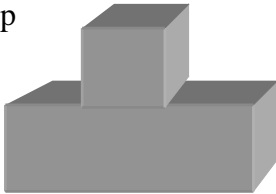
Shape	Length	Width	Area

4. For this next problem, you'll really have to use your mathematical wizardry!

In this case we'll take a basic shape (inverted 'T') and examine it in 2D space and then in 3D space. Next, we'll double the dimension of the polygon and then the polyhedron. Our investigation should include the following 3 parts and should provide proof for our conclusions:

- the total area of shape A to A^1
- the total surface area of B to B^1
- the total volume of B to B^1



<p>B Same face dimensions as above + 2 units deep</p> 	<p>B¹ Same face dimensions as above + 4 units deep</p> 
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For this investigation, ‘chunk’ the problem; break the shapes into manageable parts.

Shape	Area (Complete your work here)

Shape	Surface Area	Volume

Conclusion:
