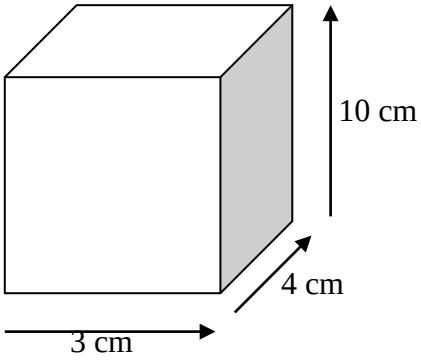
Exercise 1: MEASUREMENT OF VOLUME

1. How many unit volume cubes of 1 cm^3 will fit into the 3cm x 4cmx 10cm shape below?
2. What is the area of the top face of this rectangular prism?
3 Multiply the area of the top face by the length perpendicular to the face. What is the difference between this and your answer question 1?



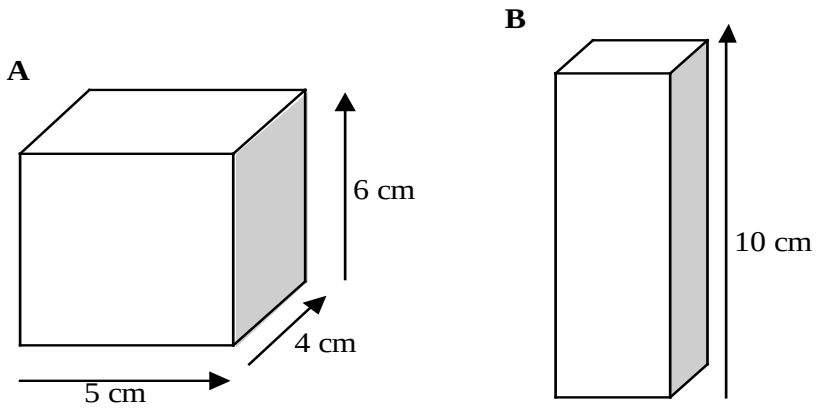
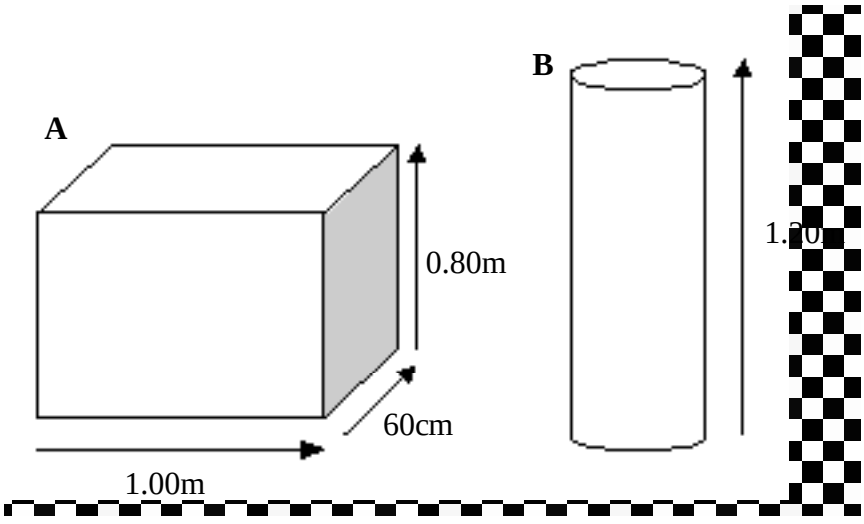
4. List 3 possible combinations of length, width, and height that will give a volume of 24 cm^3. Calculate the area of the top side. Then sketch the object.

	sketch	length	width	height	volume	top side area
Example		2 cm	3 cm	4 cm	24 cm^3	
		_____	_____	_____	_____	
		_____	_____	_____	_____	
		_____	_____	_____	_____	

5. How many liters in 1000 cm^3? Make a unit conversion factor. Convert 3 liters into units of cm^3.

6. Sketch a cube 1.00 inches on a side. Convert 1.00 in^3 into units of cm^3. There are 2.54 cm in an inch.

7. Object A is reshaped into object B; what is the area of its top face?



8. Object A is reshaped into a cylinder with the same height as object B; what is the area of its top face?