

Review for TEST Grade 8
Unit 4 – Measuring Prisms and Cylinders

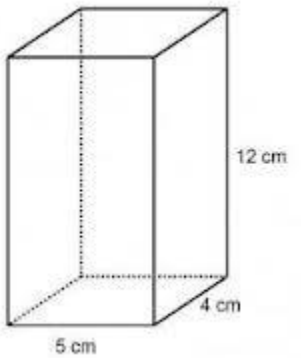
Name: _____

You must show all work to obtain full value. Include sketches, formulas and units (do all work on your own paper).

1. Draw the net of each object. Make sure to include dimensions. (On the back of sheet)
 - a) A right rectangular prism with a rectangular base of side length 6 cm, width 4 cm and with height 10 cm
 - b) A cylinder with diameter 12 cm and height 25 cm

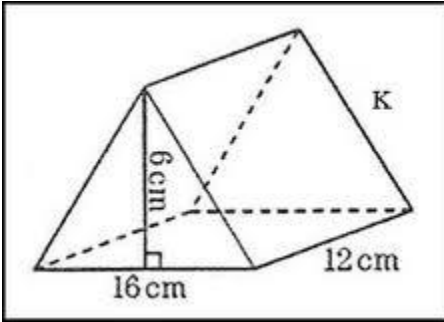
2. A cube has a surface area of 384 cm^2 .
 - (a) What is the area of one face?
 - (b) What are the dimensions of the cube?
 - (c) What is the volume of the cube?

3. Calculate the **surface area** and **volume** of this rectangular prism

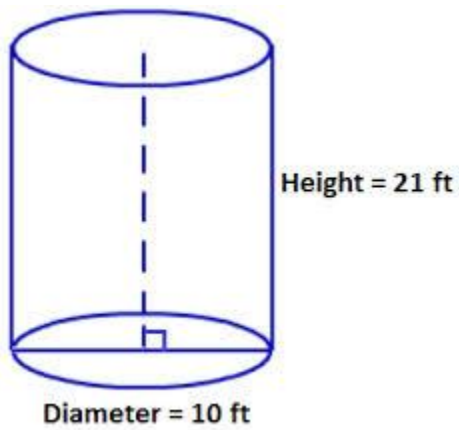


4. The volume of a rectangular prism is 336 m^3 . Give two possibilities for the dimensions of the prism (length, width and height)

5. Calculate the **surface area** and **volume** of this prism.



6. Calculate the **volume** and **surface area** of each cylinder shown below.



7. The shop class needs a box with these dimensions: 15 cm by 11 cm by 30 cm
- How much cardboard is needed?
 - They need to paint the box but 1 can covers has area 500 cm^2 .
How many sheets will be needed for both boxes?
What assumptions do you make?