

Name:

Date:

My Achievement Goal for this chapter is... (Circle one)

A+ A B C D

This Assignment is:

Good to Go

Needs Corrections

Please answer all questions on this sheet and remember to show all your work!

1. True or False:

- a) The net for a triangular prism is made up of 2 triangles and four rectangles.

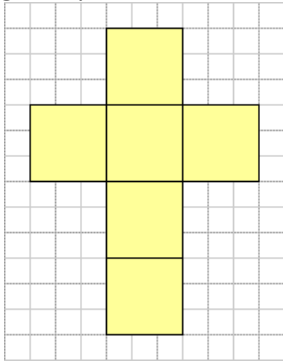
- b) Lateral surface area includes the faces and bases of a 3-D figure but not the curved surface.

- c) A cube is a form of a rectangular prism.

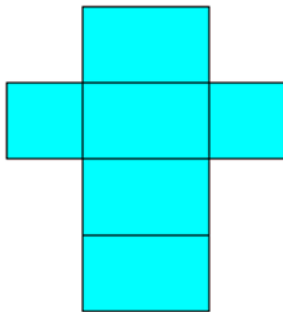
- d) The formula for the surface area of a circular cylinder is:
$$2(\textit{area of base}) + 2(\textit{area of curved surface}).$$

SURFACE AREA AND VOLUME

2. a) What is the surface area of the 3-D figure with this net? Each small square on the background grid represents 1cm^2

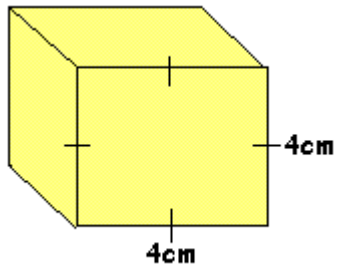


- b) What is the surface area of the 3-D figure with this net? The rectangles are similar and measure 5 cm by 3 cm.



SURFACE AREA AND VOLUME

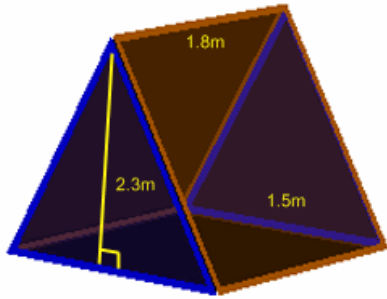
3. Calculate the surface area and volume of the following rectangular prisms:
a)



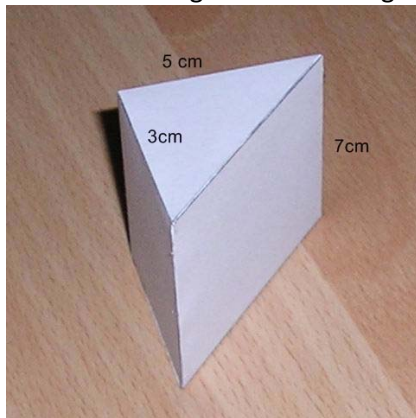
b)



4. Calculate the surface area and volume of the following triangular prisms.
a)

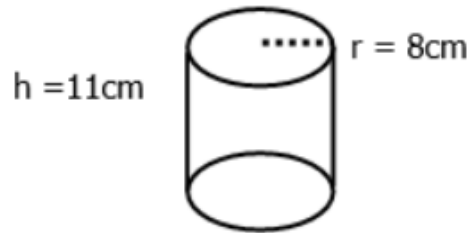


- b) Note - the triangular base is a right triangle with height 3cm.

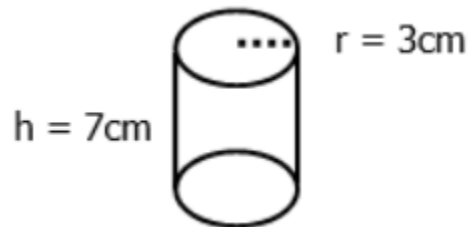


SURFACE AREA AND VOLUME

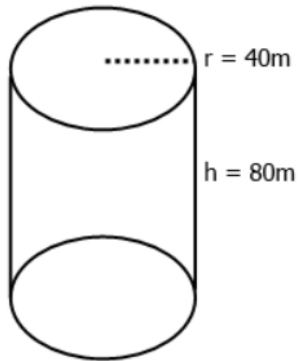
5. Calculate the surface area and volume of the following cylinders.
- a) A cylinder where the radius of the base is 8cm and the height is 11 cm.



- b) A cylinder where the radius of the base is 3cm and the height is 7 cm.



6. A cylindrical storage tank has a diameter of 40 meters and a height of 80 meters. If a liter of paint can cover 10 square meters, how many liters are needed to apply 2 coats of paint to the sides and top of one tank?



7. a) Complete the following table

	Area of Base	Height	Volume
A	35 cm^2	25cm	
B	3.8 km^2	1.2km	
C	127 mm^2		2378 mm^3
D		0.7m	2.8m^3

- c) Does it matter what shape the base is for the table above? Why or why not?