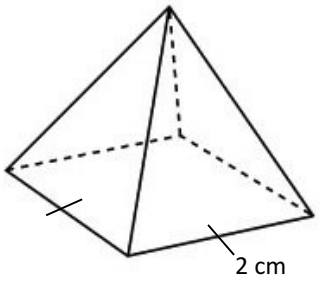
MPM1DI **Skill Reflection 3-D Measurement** /15 Name:_____

NOTE: Full solutions are required for full marks.

1. Calculate the volume of this figure, given the height of the figure is 9 cm and the base length is 2 cm. (2 marks)

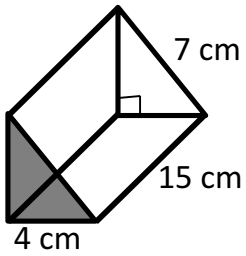


2. A conical paper cup at a water dispenser has a diameter of 5 cm, a height of 6 cm and a slant height of 6.5 cm. (4 marks)

a) How much paper, to the nearest square centimetre, is used to make the cup?

b) If an extra 8% of material is required for the seams and rim, how much paper is required to make the cup in part (a) ?

3. Calculate the surface area of this **right**-triangular prism to the nearest tenth. (4 marks)



4. John built his own skateboard half-pipe which he is now going to paint. The depth of the half-pipe is 3 m and the length is 17 m. Each pail of paint covers 120 m^2. How many pails of paint will be needed? (5 marks)