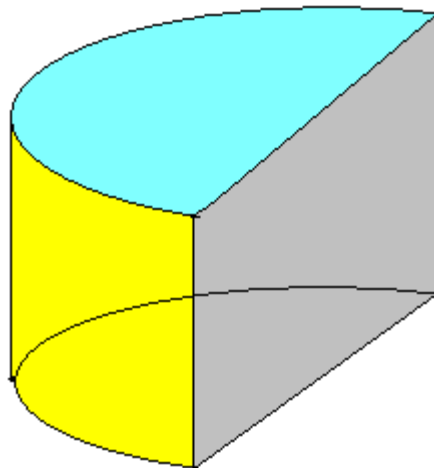Name:

QUIZ 22 – MATH GRADE 9

1. (25%) Given the following half of a perfectly cylindrical cake with radius 12 cm and height 8 cm (Diagram not to scale):

   a. (10%) Find its volume

   b. (15%) Find its surface area

2. (25%) Given a square based pyramid with base length 8 cm and height 10 cm.

   a. (7%) Sketch the pyramid

   b. (8%) Find the volume of the pyramid

   c. (10%) Find the surface area of the pyramid.

3. (30%) Given the following diagram. The Cylinder has a Diameter of 10cm and height 12 cm. The cuboid is square based and the square is **inscribed** in the circle (the base of the cylinder). The height of the cuboid is 11cm. Find the volume and surface area of the shape.