K Education Centre

GCSE Maths - Higher

Area and Volume -2
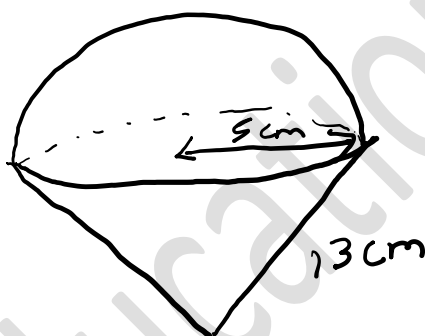
Assignment Questions

Q1 : A metal bar 2 m long and with diameter of 4 cm , has a mass of 20 kg. What is the density of the metal that the bar is made from?

Q2: Find the volume and total surface area of cylinder with height 4 cm and radius 1.5 cm.

Q3 : A container in the shape of a cone , base radius 10 cm and vertical height 20 cm is full of water. The water is poured into empty cylinder of radius 12 cm . How high the water in the cylinder?

Q4: A sphere with base radius of 6.0 cm has the same volume as cone with a base radius of 7.0 cm. Calculate the height of the cone.

Q5: A metal solid consists of hemisphere joined to a cone as shown. 20 of these are melted down to form a cube. What is the length of the side of this cube?

Q6: Find the volume of square based pyramid with height 12 cm and side of the square base as 6 cm .

Q7: Find the volume of pyramid with base as an equilateral triangle of side 6 cm. The height of pyramid is 10 cm.

Q8 : Find the volume and total surface area of frustrum formed when a small cone of radius 2 cm has been removed from larger cone , radius 4 cm.

Q9: Find the area of the keyhole shape made of circle of radius 2 cm and a sector of angle 30^0 as shown. Keep the answer in π .