Quadrilaterals, Volume + Surface Area

Q1) A wall 9m long, 6m high and 20cm thick is to be constructed using bricks of dimension 30cm × 15cm × 10cm. How many bricks will be required?.

Q2) The volume of air in a room is 204 m³. The height of the room is 6m. What is the floor area of the room.

Q3) If the number of vertices, edges and faces of a rectangular parallelopiped are denoted by v, e and f respectively, the value of (v - c + f) is

Q4) The greatest number of solid cubes with 0.2m edges that can be packed in a box whose inside dimensions are 1m by 1m by 2m will be

Q5) 3 cubes each of edge 1m, 6m and 8m respectively are melted and made into one single cube. The surface area of the new cube. will be

Q6) If the numerical value of the volume of a right circular cylinder and its curved surface area are equal, then its radius is?

Q7) The capacities of two hemispherical vessels are 6.4 litres and 21.6 likes. The ratio of their inner radii is?

Q8) The volume of a cone whose radius of the base is 6cms and length of slant height is 10cm is

Q9) what is the height of a cylinder that has the same volume and radius as a sphere of diameter 12cm?.

Q10) A metallic sphere of radius 10.5cm is melted and then recast into small cones each of radius 3.5cm and height 3cm. The number of cones thus formed will be.