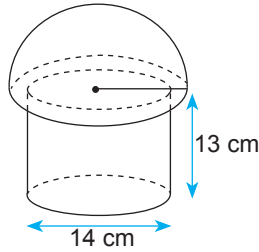


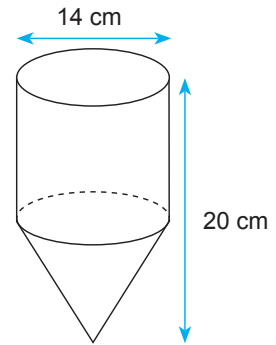
4. Study the diagram. The diameter of the hemisphere is 22 cm. Calculate
- the volume of the combined shapes.
 - the total number of marbles with a volume of 343 mm^3 which can be filled into the container.



5. An artist wants to do a full painting on the surface of a pottery. The pottery in the shape of a cylinder has the height of 10 cm and a radius of 3.5 cm. If one tube of colour can paint 100 cm^2 of drawing, how many tubes are needed to paint 10 potteries of the same type?



6. The diagram shows a solid made by combining a cylinder and a cone. $\frac{1}{2} \text{ kg}$ of sugar can produce 1 litre of syrup to make candies shaped like the solid. If the height of the cylinder is twice the radius of the cylinder, how many candies can be produced using 100 kg of sugar?



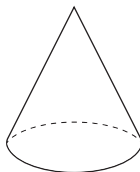
7. A cylinder open at the top with a height twice the radius of the base, is filled with water three quarter full. 539 ml water is needed to fill up the cylinder. Calculate the surface area of the cylinder, in cm^2 . (USE $\pi = \frac{22}{7}$)



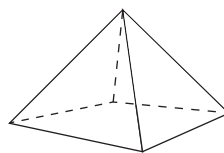
8. The diagram shows a block of cone and pyramid. If the volume of the pyramid is three times the volume of the cone, and the base area of the pyramid is twice the base area of the cone, calculate the height of the cone and the pyramid, if the height of the cone is 18 cm.



(Use $\pi = \frac{22}{7}$)



cone



pyramid