

Mathematics 1201
Assignment 3

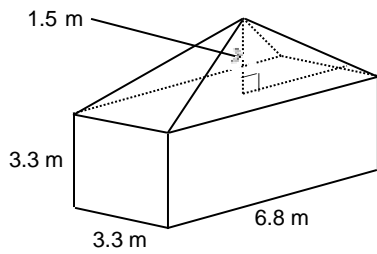
1. The radius of a volleyball is approximately 11 cm. Determine the surface area of a volleyball to the nearest square centimetre.

2. The surface area of a tennis ball is approximately 23 square inches. What is the diameter of the tennis ball to the nearest inch?

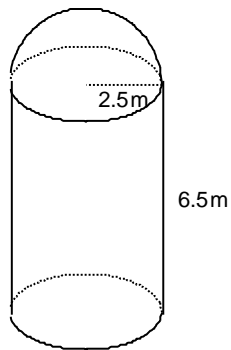
3. A hemisphere has radius 11.6 cm. What is the surface area of the hemisphere to the nearest tenth of a square centimetre?

4. The circumference of a beach ball is 55 cm. Determine its volume to the nearest cubic centimetre.

5. Determine the volume of this composite object, which is a right square prism and a right rectangular pyramid, to the nearest tenth of a cubic metre.

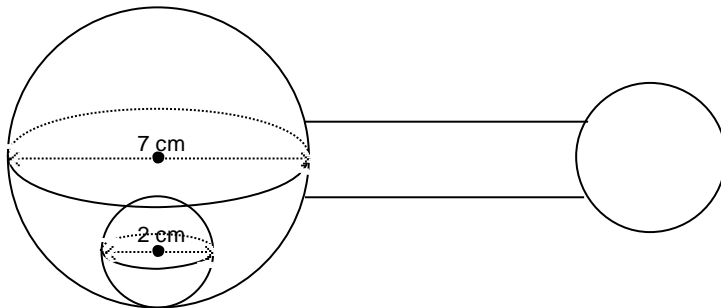


6. Determine the surface area of this composite object, which is a right cylinder and a hemisphere, to the nearest tenth of a square metre.



8. A hemisphere has radius 12 m. Determine the volume of the hemisphere to the nearest tenth of a cubic metre.

9. A baby's rattle contains a plastic ball inside a spherical case. The diameter of the plastic ball is 2 cm and the diameter of the case is 7 cm.



- Calculate the volume of the spherical case, to the nearest cubic centimetre.
- Calculate the volume of the plastic ball, to the nearest cubic centimetre.
- Calculate the volume of air in the rattle, to the nearest cubic centimetre.

10. A pail of ice cream is cylindrical, with diameter 10 in. and height 12 in. A scoop makes a sphere of ice cream with diameter 2 in. How many full scoops of ice cream can be made from this pail?

