

1. Find the volume of the following solid.



2. The diagram shows a rectangular aquarium which is filled with 30,000 cm3 of water. Calculate the height of the water level in the aquarium.



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3. The diagram shows two containers. If the water in

container P is poured into container Q , find the height

of water in container Q.





1. The diagram shows a cylindrical container. Given

that 3,080 cm3 of water is poured into the container, find the height of the water level in cm. (Take π =$ \frac{22}{7}$)

2. A rectangular container P contains some water. Cylindrical container Q is empty. If all the water in container P is poured into container Q , calculate the height of the water in container Q. (Take π = 3.142)



3. The diagram shows a solid which is half of a right circular cylinder. Given that the volume of the solid is 392π cm3 , find the value of x.



1. Find the volume of the following pyramid.



2. The diagram shows a right pyramid of square base with a volume of 408 cm3. Given that the height of the pyramid is 8.5 cm, find the length of PQ in cm.

3. The diagram shows a container in the shape of a square pyramid. The volume of water in the container is 400 ml. Find depth of the water and calculate the volume of water needed, in ml, to fill up the container until is full.





1. Find the volume of the following right circular cone.



2. Find the volume of each of the following composite solids, correct to 2 decimal places. (Take π = 3.142)



3. The diagram shows a square pyramid and a cone of the same volume. Find the base radius of the cone, correct to 2 decimal places. (Take π = 3.142)



1. Find the volume of a sphere of radius 14 m, rounding off your answer to two decimal places.



2. The diagram shows a solid made up of a right circular cone and a hemisphere. Calculate the volume of the solid in cm3.



3. The three spherical metals have radius of 3 , 4 and 5 inch respectively melt as a single sphere. And place the sphere in a cylindrical bin have a base radius 8 inch and a height of 20 inch. When the cylinder is half filled with water then find the increased height of the water.



Find the total surface area of the following solids.

1.



2.



3.

4.



Find the total surface area of the following solids.

1.



2.



3.

