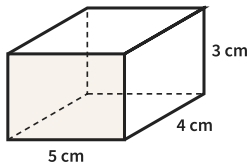


Volume and density



1

The metal block has a density of 8 g/cm^3 . Find its mass.



Volume $5 \times 4 \times 3 = 60 \text{ cm}^3$

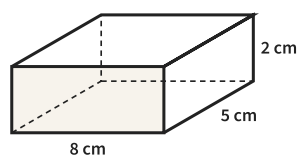
1 cm^3 has a mass of 8 g

Mass $\square \times \square = \square \text{ g}$

Answer _____

2

The metal block has a density of 2.5 g/cm^3 . Find its mass.



Volume $8 \times 5 \times 2 = 80 \text{ cm}^3$

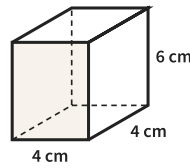
1 cm^3 has a mass of $\square \text{ g}$

Mass $\square \times \square = \square \text{ g}$

Answer _____

3

The metal block has a density of 11.3 g/cm^3 . Find its mass.



Volume $\square = \square \text{ cm}^3$

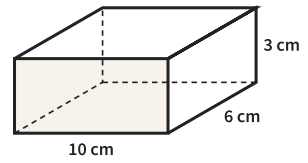
1 cm^3 has a mass of $\square \text{ g}$

Mass $\square \times \square = \square \text{ g}$

Answer _____

4

The metal block has a density of 0.7 g/cm^3 . Find its mass.

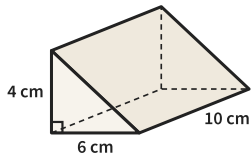


Mass $\square \times \square = \square \text{ g}$

Answer _____

5

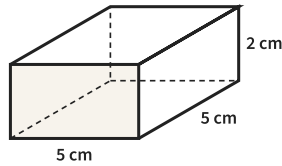
The prism is made of aluminium, density 2.7 g/cm^3 . Find its mass.



Answer _____

6

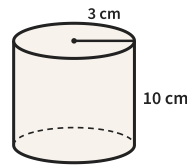
A block 5 cm by 5 cm by 2 cm has a mass of 395 g. Find its density.



Answer _____

7

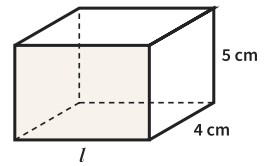
The plastic cylinder has a density of 1.2 g/cm^3 . Find its mass to 1 decimal place.



Answer _____

8

This brass bar has a mass of 1120 g and a density of 8 g/cm^3 . Find its length l .



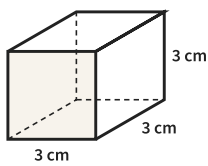
Answer _____

Volume and density *further practice*



9

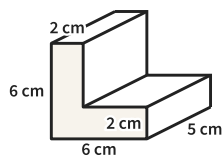
A gold cube has sides of 3 cm. Gold has a density of 19.3 g/cm^3 . Find the mass of the cube.



Answer _____

10

This steel prism has an L shaped cross section. Steel has a density of 7.8 g/cm^3 . Find its mass.



Answer _____

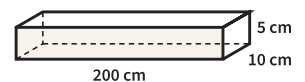
11

Block A is 4 cm by 3 cm by 2 cm, made of copper (8.9 g/cm^3). Block B is 5 cm by 5 cm by 2 cm, made of aluminium (2.7 g/cm^3). Which is heavier, and by how much?

Answer _____

12

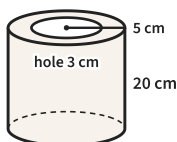
A steel beam is 200 cm long, 10 cm wide and 5 cm tall. Steel has a density of 7.8 g/cm^3 . Find its mass in kilograms.



Answer _____

13

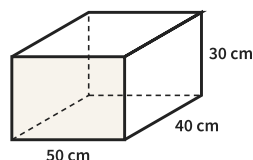
An aluminium pipe is 20 cm long. Its radius is 5 cm and the hole has radius 3 cm. Aluminium has a density of 2.7 g/cm^3 . Find the mass of the pipe to the nearest gram.



Answer _____

14

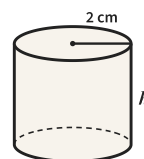
Water has a density of 1 g/cm^3 . A fish tank 50 cm by 40 cm by 30 cm is filled with water. What is the mass of the water in kilograms?



Answer _____

15

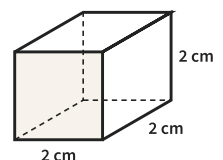
A metal cylinder has radius 2 cm, a density of 8.5 g/cm^3 and a mass of 1068 g. Find its height to 1 decimal place.



Answer _____

16

A gold coloured cube has sides of 2 cm and a mass of 70 g. Gold has a density of 19.3 g/cm^3 . Is the cube made of gold? Explain.



Answer _____