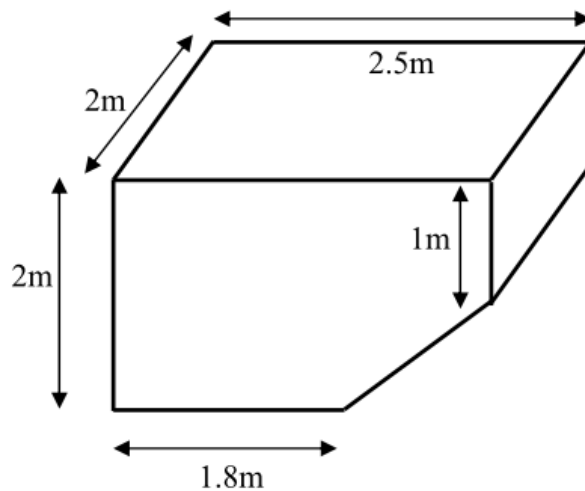


Int 2 Homework

- Calculate the volume of each of these solids, giving your answers correct to 3 significant figures.
 - Cylinder, radius 6.4 cm, height 8.6 cm.
 - Sphere, radius 5.4 cm.
 - Cone, radius 5.2 cm, height 10.4 cm.
- Find the volume in cubic metres of the underground water tank (of uniform cross-section) sketched below.



- A rectangular block of iron has length 12 cm, breadth 10 cm and height 6 cm. The block is melted and recast into small spheres of radius 0.5 cm.
 - Find the volume of one of the spheres.
 - How many such spheres can be made from the block?
- A car costs $\pounds 16000$ new. Its value depreciates by 35% in the first year and 20% in each subsequent year. Find the value after 3 years, correct to 2 significant figures.
- A piece of art is valued at $\pounds 4300$ at present. If its value appreciates at 6% p.a., find the value after 4 years, giving your answer correct to 2 significant figures.