

Converting Units of Area and Volume

(a)	(b)	(c)
<p>Which is the greater area? 5000 mm^2 or 5 cm^2</p> <p style="text-align: center;">5000 mm^2</p>	<p>A rectangle measures 6 cm by 5 cm. Find the area of the rectangle:</p> <p>(i) in cm^2</p> <p style="text-align: center;">30 cm^2</p> <p>(ii) in mm^2</p> <p style="text-align: center;">3000 mm^2</p>	<p>Which is the greater volume? 0.08 m^3 or 8000 cm^3</p> <p style="text-align: center;">0.08 m^3</p>
(d)	(e)	(f)
<p>A fish tank has dimensions 80 cm by 60 cm by 35 cm. It is filled with water. How many litres of water does it contain?</p> <p style="text-align: center;">168 litres</p>	<p>A cube has side length 6 cm. Find the volume of the cube:</p> <p>(i) in cm^3</p> <p style="text-align: center;">216 cm^3</p> <p>(ii) in m^3</p> <p style="text-align: center;">0.000216 m^3</p>	<p>A kitchen floor has an area of 9 m^2. Charles wants to varnish the floor. It costs £2.45 for a tin of varnish which covers 1500 cm^2 of floor. How much will it cost to varnish the floor?</p> <p style="text-align: center;">£147</p>
(g)	(h)	(i)
<p>Coco has 0.005 m^3 of orange juice. She wants to fill as many glasses as possible with juice. Each glass holds 210 cm^3. How many glasses can Coco completely fill?</p> <p style="text-align: center;">23</p>	<p>A standard bin holds 240 litres of rubbish. A refuse lorry can hold 26 m^3 of waste. How many full bins could be emptied into the lorry before it is full?</p> <p style="text-align: center;">108</p>	<p>Which has the greatest volume? A cuboid with a capacity of 0.6 litres, a prism with a cross section of 5000 mm^2 and length of 6 cm, or a cube with side length 0.08 m.</p> <p style="text-align: center;">The cuboid with a capacity of 0.6 litres</p>