Converting metric units of area and volume

1. Fill in the gaps to convert the following measurements of area:

a. $1 \text{ cm}^2 =$ mm^2 b. $3.5 \text{ cm}^2 =$ mm^2 c. $7 \text{ m}^2 =$ cm^2

d. $27 \text{ mm}^2 =$ cm^2 e. $143 \text{ cm}^2 =$ m^2 f. $34 \text{ cm}^2 =$ mm^2

g. $3\,000\,000 \text{ m}^2 =$ km^2 h. $4.3 \text{ km}^2 =$ m^2 i. $3 \text{ m}^2 =$ mm^2

2. Fill in the gaps to convert the following measurements of volume:

a. $4 \text{ cm}^3 =$ mm^3 b. $17.2 \text{ cm}^3 =$ mm^3

c. $12 \text{ m}^3 =$ cm^3 d. $5\,620 \text{ cm}^3 =$ m^3

e. $364\,000 \text{ m}^3 =$ km^3 f. $0.6 \text{ m}^3 =$ mm^3

e. $0.26 \text{ km}^3 =$ m^3 f. $7.8 \text{ mm}^3 =$ cm^3

3. A bottle of coke contains 2 litres. Jeevan pours 300 cm^3 into a cup.

   How much coke is left in the bottle in cubic centimetres?

4. A cuboid water tank is 4 metres tall, 4 metres long and 3 metres wide.

a. What is the volume of the tank in cubic metres?

b. How many litres of water will the tank hold?

5. A house has a loft of width 700 centimetres and length 1 100 centimetres.

   Loft insulation costs £3 per square metre.

   How much will it cost to cover the entire loft with insulation?

6. A swimming pool contains 375 000 litres of water. It has a base of 25 metres by 10 metres and is the same depth all over.

   How deep is the pool?