SCORE A+

Data & Measurement

With Classified answer book

8

Eng. Magda El-Labban

01007044107

2- Converting Metric Units — Area and Volume

1 Convert each of these measurements into the units given.

a) 84 mm2 into cm2

b) 1750 cm2 into m2

d) 0.001 km3 into m3

e) 15 cm3 into mm3

g) 3 150 000 m2 into km2

h) 8500 mm2 into cm2

j) 0.435 km3 into m3

k) 6.7 km3 into m3

c) 29 000 mm^2 into cm2

f) 0.2 m3 into cm3

i) 1700 cm2 into m2

l) 0.000045 cm3 into mm3

2 Sandeesh wants to carpet two rectangular rooms.
One of the rooms measures 1.7 m by 3 m, while the other is 670 cm by 420 cm.
How many square metres of carpet will she need?

3 A 1 litre bottle of squash says to dilute 25 cm^3 of squash with 0.5 litres of water to make one glass.

a) How many glasses of squash can you get from this bottle?

b) What is the total volume of one glass of squash in cm^3?

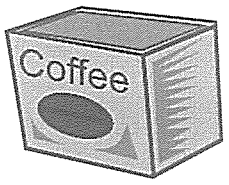
4 A swimming pool measures 3 m deep and has a base with area 375 m^2.

a) Find the volume of the pool in cm^3.

b) How many litres of water can the pool hold?

5 A brand of coffee powder is sold in cuboid packets with dimensions 20.7 cm by 25.5 cm by 10 cm.

a) A volume of 0.003 m^3 of coffee powder has already been used. What volume (in m^3) of coffee powder is left?



b) Find the total surface area of the packet of coffee powder. Give your answer in mm^2.

6 Convert each of these measurements into the units given.

a) 1.2 m^2 into mm^2

b) 673 000 000 cm^2 into km^2

c) 3 million mm^3 into km^3

d) 17 440 mm^3 into m^3

e) 50 million mm^2 into m^2

f) 60 500 mm^2 into m^2

g) 999 cm^3 into km^3

h) 0.00345 km^3 into mm^3

i) 0.001 km^2 into cm^2

f) 0.000005 km^2 into mm^2

h) 0.0006 m^3 into mm^3

i) 19 cm^3 into m^3

7) Complete each statement.

a) 900 cm^2 = 90 000 .....

b) 0.36 m^3 = ... cm^3

c) 69 cm^2 = ... m^2

8 Write down four pairs of equal areas.

A	B	C	C
6000 mm^2	60 000 cm^2	6 mm^2	6 mm^2
E	**F**	**G**	**G**
6 m^2	0.6 m^2	0.06 cm^2	0.06 cm^2

..... and ..... and ... . and ..... and .....

9 Write the correct sign (<, = or >) between each pair of measurements.

a) 65 ml 0.065 cm3

b) 3000 ml 3 m3

c) 87000 mm3 ..... 87 ml