GCSE FOUNDATION · REVISION MAT 2

Compound units

1 A car travels 210 km in 3.5 hours.

Work out its average speed.

2 A stone has a mass of 1520 g and a volume of 400 cm^3.

Work out its density.

3 A small pack has 250 g of coffee and costs £1.80.

A large pack has 400 g of coffee and costs £2.80.

Show that the larger pack is better value.

4 Femi travels for 45 minutes at 80 km/h.

Femi says the distance travelled is 3,600 km.

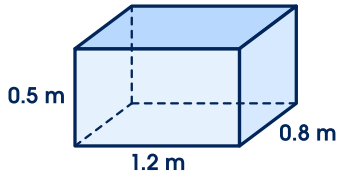
Explain the mistake Femi has made.

5 A train travels 195 km at an average speed of 78 km/h.

It leaves at 8:20.

What time does it arrive?

6 A box is a cuboid. Its weight is 600 N.



Work out the greatest pressure the box can exert on the floor.
(pressure = force ÷ area)

ANSWERS · REVISION MAT 2

Compound units

1 210 ÷ 3.5 = **60 km/h**

2 1520 ÷ 400 = **3.8 g/cm^3**

3 Small: £1.80 ÷ 250 = 0.72p per unit

Large: £2.80 ÷ 400 = 0.7p per unit

The **larger** pack costs less per unit ✓

4 The speed is per **hour**, so the time must be in hours.

45 min = 0.75 h

80 × 0.75 = **60 km**

5 Time = 195 ÷ 78 = 2.5 hours = 2 h 30 min

Arrives at **10:50**

6 Smallest face area = 0.4 m^2

Greatest pressure = 600 ÷ 0.4 = **1500 N/m^2**