Number exam review

1 This is a list of ingredients for making a pear & almond crumble for 4 people.

> Ingredients for **4** people.
>
> 80 g plain flour
> 60 g ground almonds
> 90 g soft brown sugar
> 60 g butter
> 4 ripe pears

Work out the amount of each ingredient needed to make a pear & almond crumble for **10** people.

.... g plain flour

.... g ground almonds

.... g soft brown sugar

.... g butter

.... ripe pears

(Total 3 marks)

2 The total of Kim's age and Pablo's age is 45 years.
The ratio of Kim's age to Pablo's age is 1 : 4

Work out Kim's age.

.... years

(Total 2 marks)

3 Bridget flew from the UK to Dubai.
Her flight from the UK to Dubai covered a distance of 5456 km.
The flight time was 7 hours 45 minutes.

Work out the average speed of the flight.

………………. km/h

(Total 3 marks)

4 Rajesh and Gudi share some money in the ratio 2 : 5
Rajesh receives £240

Work out the amount of money that Gudi receives.

£ ………………………

(Total 2 marks)

5 Two fruit drinks, *Fruto* and *Tropico*, are sold in cartons.

a *Fruto* contains only orange and mango.
The ratio of orange to mango is 3 : 2
A carton of *Fruto* contains a total volume of 250 cm^3.

Find the volume of orange in a carton of *Fruto*.

………………… cm^3

(3)

b *Tropico* contains only lemon, lime and grapefruit.
The ratios of lemon to lime to grapefruit are 1 : 2 : 5
The volume fo grapefruit in a carton of *Tropico* is 200 cm^3.

Find the total volume of *Tropico* in a carton.

………………… cm^3

(3)

6 The amount of petrol a car uses is directly proportional to the distance it travels
A car uses 3 litres of petrol when it travels 50 km.

a Work out the amount of petrol the car uses when it travels 125 km.

………………. litres

(2)

b Work out the distance the car travels when it uses 5.7 litres of petrol.

………………. km

(2)

(Total 4 marks)

7 The table shows the mean distances of the planets from the Sun.

Planet	Mean distance from the Sun (km)
Mercury	5.8×10^7
Venus	1.1×10^8
Earth	1.5×10^8
Mars	2.3×10^8
Jupiter	7.8×10^8
Saturn	1.4×10^9
Uranus	2.9×10^9
Neptune	4.5×10^9

a Which planet is approximately 4 times as far from the Sun as Mercury?

………………………

(1)

b Find the ratio of the mean distance of Earth from the Sun to the mean distance of Neptune from the Sun. Give your answer in the form $1 : n$

....

(2)

(Total 3 marks)

8 Ann and Bob shared £240 in the ratio 3 : 5

Ann gave a **half** of her share to Colin.
Bob gave a **tenth** of his share to Colin.

What fraction of the £240 did Colin receive?

....

(Total 4 marks)

9 A company bought a van that had a value of £12 000
Each year the value of the van depreciates by 25%.

a Work out the value of the van at the end of three years.

£ ....

(3)

The company bought a new truck.
Each year the value of the truck depreciates by 20%.
The value of the new truck can be multiplied by a single number to find its value at the end of four years.

b Find this single number as a decimal.

....

(2)

(Total 5 marks)