Q1.

Luke saves 10p coins and 20p coins.

He has

> three times as many 10p coins as 20p coins
> a total of £17

How many 10p coins does he have?

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Answer ....

(Total 3 marks)

Q2.

In Scotland, squirrels are red or grey in the ratio   red : grey = $1 : 2\frac{1}{2}$

(a)   What fraction of the squirrels in Scotland are red?

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Answer ....

(2)

(b)   In Scotland there are 120 000 red squirrels.

How many squirrels are there altogether in Scotland?

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Answer ....

(2)

(Total 4 marks)

Q3.

(a) Divide £720 in the ratio   5 : 1

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Answer £ .... and £ ....

(2)

(b) Sarah has £135
Gemma has £70
Beth has £35

Sarah gives some money to Gemma and Beth.

The ratio of the amount of money Sarah, Gemma and Beth have **now** is 3 : 2 : 1

How much money did Sarah give to Gemma?

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Answer £ ....

(4)
(Total 6 marks)

Q4.

There are 40% more black balls than white balls in a bag.

Work out the ratio of black balls to white balls.
Give your answer in its simplest form.

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Answer .... : ....

(Total 2 marks)

Q5.

Abby and Judy share some money.
Abby gets 25%

(a)   Write   Abby's share : Judy's share   as a ratio.
Give your answer in its simplest form.

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Answer .... : ....

(2)

(b)   Judy gets £19.50

How much does Abby get?

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Answer £ ....

(2)
(Total 4 marks)

Q6.

John has 500 ml of apple juice.

He wants to mix apple juice with fizzy water in the ratio 1 : 10

Fizzy water is sold in 1500 ml bottles.

Work out the smallest number of bottles of fizzy water needed to mix all the apple juice.
You **must** show your working.

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Answer ....

(Total 4 marks)

Q7. A recipe needs 300 grams of flour to make 4 cakes.

(a)   How much flour is needed to make 6 cakes?

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Answer .... grams

(2)

(b)   1 kg = 1000 grams

How many cakes can be made from a 1.5 kg bag of flour?

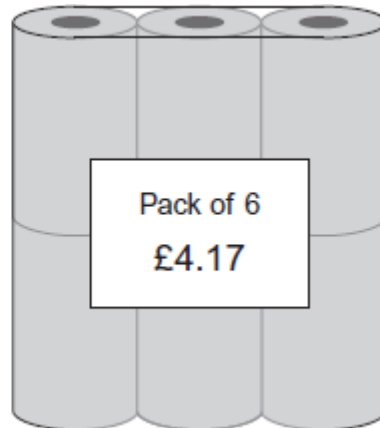...

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Answer ....

(3)
(Total 5 marks)

Q8. Kitchen rolls are sold in a pack of 2 or a pack of 6

Pack of 6
£4.17

Pack of 2
£1.38

Which pack is the better value for money?
You **must** show your working.

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Answer ....

(Total 3 marks)

Q9. Divide 4860 in the ratio 5 : 4 : 3

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Answer .... : .... : ....

(Total 3 marks)

Q10.

A smoothie recipe uses banana, kiwi and yoghurt in the ratio   4 : 1 : 3   by weight.

(a)   A smoothie is made using 280 g of banana.

How much kiwi and yoghurt are needed?

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Kiwi .... g

Yoghurt .... g

(3)

(b)   Each smoothie costs 72p to make.

The smoothies are sold at the school fayre.

The school wants to make at least 30% profit on each smoothie.

Work out the cheapest selling price to do this.

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Answer ....

(4)
(Total 7 marks)

Q11.

A smoothie recipe uses banana, kiwi and yoghurt in the ratio   4 : 1 : 3   by weight.

(a)   A smoothie is made using 280 g of banana.

How much kiwi and yoghurt are needed?

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Kiwi .... g

Yoghurt .... g

(3)

(b)   Express the weight of kiwi as a percentage of the weight of the smoothie.

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Answer .... %

(2)

(c)   Each smoothie costs 72p to make.

(i)   The smoothies are sold at the school fayre.
The school wants to make at least 30% profit on each smoothie.

Work out the cheapest selling price to do this.

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Answer ....

(4)

(ii)   The cost of banana for one smoothie is 15p.
The price of bananas increases by 40%.

Work out the percentage increase in the cost of making a smoothie.

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Answer .... %

(4)
(Total 13 marks)