1 Heidi wants to make some biscuits using this recipe.

Makes 12 biscuits
125 g butter 200 g flour 50 g sugar

Heidi thinks that she has,

500 g butter
700 g flour
250 g sugar

Assuming that these weights are correct,

(a) work out the greatest number of biscuits Heidi can make.
You must show all your working.

.....

(4)

Heidi is wrong.
She has more than 250 g of sugar.

(b) Does this affect the greatest number of biscuits Heidi can make?
Give a reason for your answer.

.....

.....

.....

(1)

(Total for Question 1 is 5 marks)

2 Natalie makes potato cakes in a restaurant.

She mixes potato, cheese and onion so that

weight of potato : weight of cheese : weight of onion = 9 : 2 : 1

Natalie needs to make 6000 g of potato cakes.

Cheese costs £2.25 for 175 g.

Work out the cost of the cheese needed to make 6000 g of potato cakes.

£.....

(Total for Question 2 is 4 marks)

3 Here is a list of ingredients for making 10 scones.

Ingredients for 10 scones

75 g	butter
350 g	self-raising flour
40 g	sugar
150 m*l*	milk
2	eggs

Mia wants to make 25 scones.
Work out how much sugar she needs.

..... g

(Total for Question 3 is 2 marks)

4 Jo is going to buy 15 rolls of wallpaper.

Here is some information about the cost of rolls of wallpaper from each of two shops.

Chic Decor	**Style Papers**
3 rolls for £36	Pack of 5 rolls normal price £70 12% off the normal price

Jo wants to buy the 15 rolls of wallpaper as cheaply as possible.

Should Jo buy the wallpaper from Chic Decor or from Style Papers?
You must show how you get your answer.

(Total for Question 4 is 4 marks)

5 Jessica runs for 15 minutes at an average speed of 6 miles per hour.
She then runs for 40 minutes at an average speed of 9 miles per hour.

It takes Amy 45 minutes to run the same total distance that Jessica runs.

Work out Amy's average speed.
Give your answer in miles per hour.

..... miles per hour

(Total for Question 5 is 4 marks)

6 214 people go on a school trip.
The people on the trip are either adults or children.

There are 14 adults on the trip.
35% of the children on the trip are wearing a hat.

Find the number of children on the trip who are **not** wearing a hat.

.....

(Total for Question 6 is 4 marks)

7 A shop has two different special offers on milk.



75p

Pay for 2 bottles
get 1 bottle free



£1.28

Pay for 1 bottle
get 1 bottle half price

Which offer gives the better value for money?
You must show how you get your answer.

(Total for Question 7 is 4 marks)

8 2.5 kg of onions and 2 kg of carrots cost a total of £2.36
3 kg of carrots cost £1.74

Stuart has £2
He wants to buy 4 kg of onions.

Does Stuart have enough money to buy 4 kg of onions?
You must show how you get your answer.

(Total for Question 8 is 5 marks)

9 Here is a list of ingredients for making 10 scones.

Ingredients for 10 scones
80 g butter
350 g self-raising flour
30 g sugar
2 eggs

Martin has

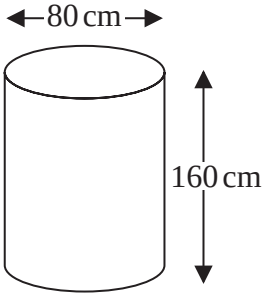
100 g butter
1 kg self-raising flour
50 g sugar
4 eggs

Martin wants to make 25 scones.
He has not got enough of some of the ingredients.

Work out how much more of each of these ingredients he needs.

(Total for Question 9 is 4 marks)

10 Karina has 4 tanks on her tractor.
Each tank is a cylinder with diameter 80 cm and height 160 cm.



The 4 tanks are to be filled completely with a mixture of fertiliser and water.

The fertiliser has to be mixed with water in the ratio 1 : 100 by volume.
Karina has 32 litres of fertiliser.

1 litre = 1000 cm^3

Has Karina enough fertiliser for the 4 tanks?
You must show how you get your answer.

(Total for Question 10 is 4 marks)

11 Here is the list of ingredients for making 20 biscuits.

Ingredients for 20 biscuits
150 g butter 100 g sugar 250 g flour

Harry wants to make 60 biscuits.

How much flour does Harry need?

..... g

(Total for Question 11 is 2 marks)

12 Asha buys 180 cans of cola.

The cans are sold in packs.
There are 12 cans in each pack.
Each pack costs £3

(a) Work out the total cost of the cola Asha buys.

£.....

(3)

Ethan buys a box of 24 cans of lemonade for £7
There are 330 m*l* of lemonade in each can.

(b) Work out the cost of 100 m*l* of lemonade.
Give your answer correct to the nearest penny.

.....p

(3)

(Total for Question 12 is 6 marks)

13 120 boxes cost £6
270 bags cost £10

A bag is cheaper than a box.

How much cheaper?
Give your answer in pence correct to 1 decimal place.

.....p

(Total for Question 13 is 4 marks)

14 There are only red beads and green beads in a bag.

number of red beads : number of green beads = 1 : 4

There are 35 red beads in the bag.

Work out the total number of beads in the bag.

.....

(Total for Question 14 is 2 marks)

15 It takes 14 hours for 5 identical pumps to fill a water tank.

How many hours would it take 4 of these pumps to fill another water tank of the same size?

..... hours

(Total for Question 15 is 2 marks)