1 Here is a list of ingredients needed to make apple crumble for 6 people.

Apple Crumble
Ingredients for 6 people
12 apples 150 g butter 195 g flour 90 g oats 120 g sugar

Nadiya wants to make apple crumble for 14 people.

(a) Work out the amount of butter she needs.

Butter for 1 person :

$\frac{150\text{ g}}{6} = 25\text{ g}$

Butter for 14 people :

$25\text{ g} \times 14 = 350\text{ g}$ (1)

(1)

350 g

(2)

Alison makes apple crumble for a group of people.

She uses 630 g of oats.

(b) Work out the number of people in the group.

Oats for 1 person :

$\frac{90\text{ g}}{6} = 15\text{ g}$

(1)

Finding number of people :

$\frac{630\text{ g}}{15\text{ g}} = 42\text{ people}$ (1)

42

(2)

At a cake sale, Michael sells some lemon cakes and some chocolate cakes.

the number of lemon cakes he sells : the number of chocolate cakes he sells = 2 : 7

Michael sells a total of 162 cakes.

(c) Work out the number of lemon cakes Michael sells.

Total ratio : 2 + 7 = 9

Lemon cake sold : $\frac{2}{9} \times 162 = 36$ cakes

(1) (1)

36

(2)

(Total for Question 1 is 6 marks)

2 5 children are playing on a trampoline.
The mean weight of the 5 children is 28 kg.

2 of the children get off the trampoline.
The mean weight of these 2 children is 26.5 kg.

Work out the mean weight of the 3 children who remain on the trampoline.

Total weight of 5 children = $5 \times 28 = 140$ kg (1)

Total weight of 2 children = $2 \times 26.5 = 53$ kg

Total weight of 3 children = $140 - 53 = 87$ kg

Mean weight of 3 children = $\frac{87}{3}$ (1)

$= 29$ kg

29 (1) kg

(Total for Question 2 is 3 marks)

3 In a shop,

3 bottles of juice cost \$5.25

2 bottles of juice and 5 bars of chocolate cost \$9.75

Work out the cost of 5 bottles of juice and 3 bars of chocolate.

Finding cost for 1 bottle of juice:

$5.25 \div 3 = 1.75$ (1)

Finding cost for 1 bar of chocolate:

$2(1.75) + 5x = 9.75$ – let bar of chocolate = x

$5x = 9.75 - 3.5$

$5x = 6.25$

$x = \frac{6.25}{5} = 1.25$ (1)

$\therefore$ Total: $5(1.75) + 3(1.25)$ (1)

$= 8.75 + 3.75 = 12.50$ (1)

\$ 12.50

(Total for Question 3 is 4 marks)

4 Here is a list of ingredients needed to make 24 currant buns.

Ingredients for 24 currant buns	
100 grams	butter
70 grams	sugar
140 grams	flour
40 grams	currants
30 millilitres	milk
2	eggs

Gina wants to make 60 currant buns.

(a) Work out the weight of butter Gina needs.

Butter for 1 bun : $\frac{100\text{ g}}{24} = 4.167\ldots\text{ g}$

Butter for 60 buns : $4.167\ldots\text{ g} \times 60$ (1)

$= 250\text{ g}$ (1)

250 ..... grams

(2)

(Total for Question 4 is 2 marks)

5 In Koko's shop

5 chocolate bars cost \$5.75

2 chocolate bars and 3 packets of sweets cost \$7.85

Work out the cost of one packet of sweets.

Cost of one chocolate bar = $5.75 \div 5$

$= \$1.15$ (1)

1 packet of sweets = x

$2(1.15) + 3(x) = 7.85$

$2.30 + 3x = 7.85$

$3x = 7.85 - 2.30$

$= 5.55$

$x = \frac{5.55}{3}$ (1)

$x = 1.85$ (1)

\$ 1.85

(Total for Question 5 is 3 marks)

6 Johan wants to make some small cakes.

He finds a recipe that says he needs 360 grams of flour to make 15 small cakes.

Johan has 0.85 kg of flour.

Johan works out how much flour he would need to make 38 small cakes, using the information given in the recipe.

Does Johan have enough flour, according to the recipe, to make 38 small cakes? Show your working clearly.

Convert to grams : 0.85 kg × 1000 = 850 g (1)

Flour for 1 small cake : 360 g ÷ 15 = 24 g (1)

Flour for 38 small cakes : 24 g × 38 = 912 g (1)

No. Johan only has 850 g flour but needs 912 g. (1)

(Total for Question 6 is 4 marks)

Lauren has 3 litres of fruit juice.
She is going to use the fruit juice to make some drinks for a party.
Each cup of drink will contain 225 millilitres of fruit juice.

Lauren is going to make as many cups of drink as possible.

7 (c) Work out how much fruit juice Lauren has left when she has made as many cups of drink as possible.
Give your answer in millilitres.

$3 \times 1000 = 3000$ (1)

$\frac{3000}{225} = 13.3$
≈ 13 cups (1)

$3000 - (13 \times 225)$ (1)

$= 3000 - 2925$

$= 75$ (1)

75 millilitres
(4)

(Total for Question 7 is 4 marks)