1 The following rule is used to work out the total cost, in euros, of hiring a room.

Total cost = 9 euros for each hour plus 20 euros

Paolo hires the room for 5 hours.

(a) Work out the total cost.

$(5 \times 9) + 20$

$= 45 + 20$ (1)

$= 65$ (1)

65 ..... euros

(2)

Agathe also hires the room.
The total cost is 164 euros.

(b) For how many hours does Agathe hire the room?

$\frac{164 - 20}{x \text{ hours}}$ (1) $=$ 9 euros per hour

$144 = 9x$

$x = \frac{144}{9}$ (1)

$= 16$ hours (1)

16 ..... hours

(3)

The total cost of hiring the room for n hours is T euros.

(c) Write down a formula for T in terms of n.

$T = 9n + 20$ (2)

$T = 9n + 20$

(2)

(Total for Question 1 is 7 marks)

2 Freda is playing a car racing game on her computer.

She sets up her computer so that her car completes each lap in the same number of seconds.
Her car completes 3 laps in 72 seconds.

To win the game, Freda has to complete 68 laps in less than half an hour.

Does Freda win the game?
Give a reason for your answer.

Find the time she completes in 1 lap :

$\frac{72\ s}{3\ lap} = 24\ s\ per\ lap$ (1)

Find the time taken to complete 68 laps :

68×24 (1) $= 1632\ s \div 60$ ← convert to minutes

$= 27.2\ minute$ (1)

∴ Yes. Freda wins the game. (1)

(Total for Question 2 is 4 marks)

3 Alison buys 2 boxes of strawberries, box **A** and box **B**.

Box **A** contains 15 strawberries.
The strawberries in box **A** have a mean weight of 24 grams.

Box **B** contains 25 strawberries.
The strawberries in box **B** have a mean weight of 18 grams.

Alison puts all 40 strawberries into a bowl.
Work out the mean weight of the 40 strawberries.

mean = total weight / no. of strawberry

Calculating total weight of box A :

$24 \times 15 = 360$ g

Calculating total weight of box B :

$18 \times 25 = 450$ g (1)

Calculating total weight of all strawberries :

$360 + 450 = 810$ g (1)

Mean weight of 40 strawberries :

$\frac{810 \text{ g}}{40} = 20.25$ g (1)

20.25 ..... grams

(Total for Question 3 is 3 marks)

4 Gavin bought 3 pairs of jeans in the USA.
He paid a **total** of $72

Gavin sold the 3 pairs of jeans in England.
He sold each pair of jeans for £34.50

£1 = $1.34

Work out Gavin's percentage profit.
Give your answer correct to the nearest whole number.

Finding price he pays for 1 pair :

$$\frac{\$72}{3} = \$24$$

Converting the price to £ :

$$\$24 \times \frac{1\,£}{\$1.34} = £17.91 \text{ (1 pair)}$$ (1)

Calculating profit he earns for 1 pair :

£34.50 − £17.91 = £16.59 (1 pair) (1)

Calculating his percentage profit :

$$\frac{16.59}{17.91} \times 100\% = 92.6\%$$ (1)

= 93 % (nearest whole number) (1)

93 ..... %

(Total for Question 4 is 4 marks)

5 The diagram shows the plan of Sophia's gym floor.

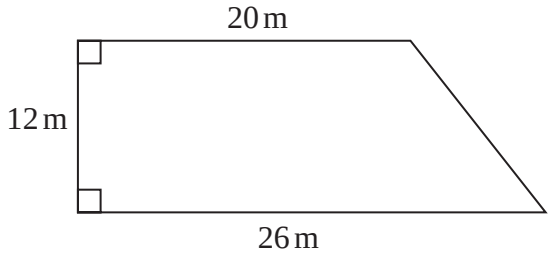


Diagram **NOT** accurately drawn

Sophia is going to paint all the gym floor.

Each tin of paint she is going to use covers an area of $20\,m^2$

There is a special offer on the paint that Sophia is going to buy.

Special Offer

1 tin for $13
4 tins for $40

Work out the least amount of money that Sophia has to pay in order to buy all the paint she needs.
Show your working clearly.

Finding the total area of gym floor :

$\frac{1}{2} \times (20 + 26) \times 12 = 276\ m^2$ (1)

(1)

Finding number of paint tins she needs :

$\frac{276\ m^2}{20\ m^2} = 13.8$ tins

(1)

∴ She needs 14 tins (13.8 is not a whole number)

• To buy 14 tins

Option 1 : $14 \times \$13 = \$182$ (1)

Option 2 : $4 \times \$40 = \$160$

Option 3 : $(3 \times \$40) + (2 \times \$13) = \$146$ (1)

$ 146

(Total for Question 5 is 5 marks)

6 Mike is going to buy

1 hammer at £6
2 boxes of nails at £3.50 for each box
4 pieces of wood at £4.20 for each piece
some pairs of gloves at £1.80 for each pair

Mike has £40 to spend in total on these items.
He wants to buy as many pairs of gloves as he can.

Work out the greatest number of pairs of gloves that Mike can buy.

1 hammer = £6
2 nails = £3.50 x 2 = £7
4 woods = £4.20 x 4 = £16.80

Total = 6 + 7 + 16.80 = £29.80 (1)

Balance money = 40 - 29.80 = 10.20 (1)

10.20 ÷ 1.80 = 5.667 (1)

round down to the nearest integer

≈ 5

Mike can buy 5 pairs of gloves

5 (1)

(Total for Question 6 is 4 marks)

7 Greg bought 36 oranges.
He paid 50p for each orange.

Greg sold $\frac{1}{2}$ of the oranges for 60p each.

He sold $\frac{1}{3}$ of the oranges for 40p each.

He sold the remainder of the oranges for 25p each.

Work out Greg's percentage loss.

Money Greg spent :

$36 \times 50p = 1800p$ (1)

Money Greg made :

$\frac{1}{2} \times 36 \times 60p = 1080p$

$\frac{1}{3} \times 36 \times 40p = 480p$

$\left(1 - \frac{1}{2} - \frac{1}{3}\right) \times 36 \times 25p = 150p$ (1)

Total amount sold : $1080p + 480p + 150p = 1710p$ (1)

Loss = $1800p - 1710p$

= $90p$

Percentage loss = $\frac{90}{1800} \times 100$ (1) = 5 %

↑ initial money he spent

5 (1) %

(Total for Question 7 is 5 marks)

8 The diagram shows Yuen's garden.

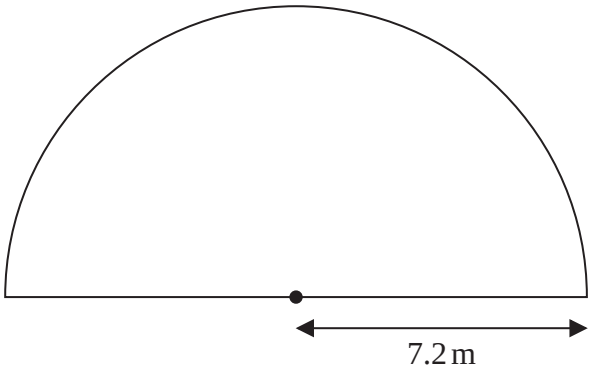


Diagram **NOT** accurately drawn

The garden is in the shape of a semicircle of radius 7.2 m.
Yuen is going to cover his garden with grass seed.

Yuen has 12 boxes of grass seed.
Each box of grass seed contains enough seed to cover 6 m^2 of the garden.

Has Yuen enough grass seed for his garden?
Show your working clearly.

Area of semicircle $= \frac{\pi r^2}{2}$ (1)

Area of semicircle $= \frac{\pi (7.2)^2}{2} = 81.43\ m^2$

Amount of grass seed $= 12 \times 6 = 72\ m^2$ (1)

No, Yuen does not have enough grass seed for his garden. He only has enough grass seed to cover $72\ m^2$ which is less than $81.43\ m^2$. (1)

(Total for Question 8 is 3 marks)

9 Betsy was given $75 for her birthday.

She saved some of the money and spent the rest on a T-shirt and a bag.

Betsy saved 40% of the $75
She spent $12 more on the bag than she spent on the T-shirt.

Work out how much Betsy spent on the bag.

Money Betsy saved :

$\frac{40}{100} \times 75 = 30$ (1)

Money she spent on bag and T-shirt :

$75 - 30 = 45$ (1)

Money she spent on bag :

Let money spent on bag $= x$

$x + (x - 12) = 45$ (1)

$2x - 12 = 45$

$2x = 57$

$x = 28.5$ (1)

$ 28.5

(Total for Question 9 is 4 marks)

10 Three tins, *A*, *B* and *C*, each contain buttons.

Tin *A* contains *x* buttons.
Tin *B* contains 4 times the number of buttons that tin *A* contains.
Tin *C* contains 7 fewer buttons than tin *A*.

The total number of buttons in the three tins is 137

Work out the number of buttons in tin *C*.

$A = x$

$B = 4x$ (1)

$C = x - 7$

$\text{Total} = A + B + C$

$= x + 4x + (x - 7) = 137$ (1)

$6x = 137 + 7$

$6x = 144$

$x = \frac{144}{6} = 24$ (1)

$C = 24 - 7$

$= 17$ (1)

17

(Total for Question 10 is 4 marks)

11 Kamal sells 240 ice creams for a total of $640

$\frac{1}{3}$ of the ice creams he sells are large.

The cost of each large ice cream he sells is $3.80

All the other ice creams he sells are small.
He sells each small ice cream for the same cost.

Work out the cost of each small ice cream.

Large ice cream sold :

$\frac{1}{3} \times 240 = 80$ (1)

$80 \times 3.80 = \$304$ (1)

Total cost for small ice cream :

$640 - 304 = 336$

Cost for each small ice cream :

$\frac{336}{240 - 80} = \frac{336}{160}$ (1) $= \$2.10$ (1)

$ 2.10

(Total for Question 11 is 4 marks)

12 Sam takes an English exam.
There are two papers in the exam.
Each paper has a maximum mark of 80

To pass the exam, Sam needs to get at least 60% of the total marks.

Sam gets 55% of the 80 marks in paper 1

Work out the least number of marks that Sam must get in paper 2 to pass the English exam.

To pass : $\frac{\text{Paper 1 + paper 2}}{160} \times 100\% > 60\%$

To get at least 60% : $\frac{x}{160} \times 100\% = 60\%$

$x = \frac{60}{100} \times 160 = 96$ (1)

↖ total paper 1 + paper 2

Paper 1 : $\frac{55}{100} \times 80 = 44$ marks (1)

To pass : $96 - 44$ (1)

$= 52$ (1)

∴ Sam must get at least 52 in paper 2

52

(Total for Question 12 is 4 marks)

13 120 children go on an activity holiday.
The ratio of the number of girls to the number of boys is 3 : 5

On Sunday, all the children either go sailing or go climbing.

$\frac{16}{25}$ of the boys go climbing.

Twice as many girls go sailing as go climbing.

Work out how many children go sailing on Sunday.

Total ratio : 3 + 5 = 8

$\frac{120}{8} = 15$ (1)

Boys : $5 \times 15 = 75$

Girls : $3 \times 15 = 45$ (1)

Climbing

Boys : $\frac{16}{25} \times 75 = 48$ (1)

Girls : $\frac{1}{3} \times 45 = 15$ (1)

Sailing

Boys : $75 - 48 = 27$

Girls : $45 - 15 = 30$

Total sailing : $27 + 30$ (1)

$= 57$ (1)

57

(Total for Question 13 is 6 marks)

14 On a farm there are chickens, ducks and pigs.

The ratio of the number of chickens to the number of ducks is 7 : 2
The ratio of the number of ducks to the number of pigs is 5 : 9
There are 36 pigs on the farm.

Work out the number of chickens on the farm.

Finding number of ducks :

$\frac{36}{9} \times 5 = 20$ ducks (1)

Finding number of chickens :

$\frac{20}{2} \times 7 = 70$ chickens

(1) (1)

70

(Total for Question 14 is 3 marks)

15 Jethro has sat 5 tests.
Each test was marked out of 100 and Jethro's mean mark for the 5 tests is 74

Jethro has to sit one more test that is also to be marked out of 100

Jethro wants his mean mark for all 6 tests to be at least 77

Work out the least mark that Jethro needs to get for the last test.

Jethro's total marks for 5 tests :

$74 \times 5 = 370$ (1)

To get mean marks of 77 or more :

$\frac{370 + x}{6} = 77$ x : mark for 6th test

$370 + x = 77 \times 6$

$370 + x = 462$ (1)

$x = 462 - 370 = 92$ (1)

92

(Total for Question 15 is 3 marks)

16 This formula can be used to work out the cost, in riyals, of hiring a bicycle in Qatar for a number of days.

Cost = 65 × number of days + 44

Ghalia hired a bicycle in Qatar for 14 days.

(a) Work out the cost.

cost = 65 × 14 + 44 (1)

= 954 (1)

954 riyals

(2)

This formula can be used to work out the cost, in riyals, of hiring a helmet in Qatar for a number of days.

Cost = 12.5 × number of days

Kasun wants to hire a bicycle and a helmet for the same number of days.
He wants to hire them for as many days as he can.
He has 750 riyals to spend.

(b) Work out how much of the 750 riyals is not spent.

750 = [65 × days + 44] + [12.5 × days]

750 − 44 = 65 days + 12.5 days (1)

706 = 77.5 days

$\text{days} = \frac{706}{77.5}$

= 9.109 (1)

∴ Kasun can only afford 9 days

706 = 77.5 (9) (1)

706 = 697.5

706 − 697.5 = 8.5 (1)

∴ 8.5 riyals left unspent

8.5 riyals

(4)

(Total for Question 16 is 6 marks)

17 Sabbir has some boxes of bananas and some sacks of tomatoes.
The weight of each box of bananas is the same and the weight of each sack of tomatoes is the same.

The weight of 3 boxes of bananas is 42 kg.
The weight of 8 sacks of tomatoes is 68 kg.

Work out the total weight of 9 boxes of bananas and 15 sacks of tomatoes.

1 box of bananas $= \frac{42\text{ kg}}{3} = 14\text{ kg}$

1 sack of tomatoes $= \frac{68\text{ kg}}{8} = 8.5\text{ kg}$ (1)

Total weight of 9 boxes of bananas and 15 sacks of tomatoes:

$(9 \times 14) + (15 \times 8.5)$

$= 126 + 127.5$ (1)

$= 253.5\text{ kg}$ (1)

253.5 kg

(Total for Question 17 is 3 marks)

18 Mikhal has 1200 grams of cake mixture.

He is going to make 3 cakes, cake *A*, cake *B* and cake *C*.

$\frac{4}{15}$ of the weight of the cake mixture will be used to make cake *A*.

The rest of the cake mixture will be used to make cake *B* and cake *C*.

The weight of the cake mixture used to make cake *B* and the weight of the cake mixture used to make cake *C* will be in the ratio 3 : 8

Work out the weight of the cake mixture used to make each of cake *A*, cake *B* and cake *C*.

Finding weight of cake A :

$\frac{4}{15} \times 1200 = 320$ (1)

Finding weight of cake B and C :

$1200 - 320 = 880$ (1)

Total ratio of cake B and C :

$3 + 8 = 11$

weight of cake B : $\frac{3}{11} \times 880 = 240$ (1)

weight of cake C : $\frac{8}{11} \times 880 = 640$ (1)

Cake *A* 320 grams

Cake *B* 240 grams

Cake *C* 640 grams

(Total for Question 18 is 4 marks)

19 On Wednesday, the price of 1 litre of petrol was £1.26
The price of petrol on Wednesday was 5% more than the price of petrol on the previous Monday.

Calculate the price of 30 litres of petrol on the previous Monday.

Let the price of 1 litre petrol on Monday = x

$$x + \frac{5}{100}x = 1.26$$

$$1.05x = 1.26$$

$$x = \frac{1.26}{1.05}$$

$$= 1.2 \quad (1)$$

Price of 30 litres of petrol on Monday:

$$1.2 \times 30 = 36 \quad (1)$$

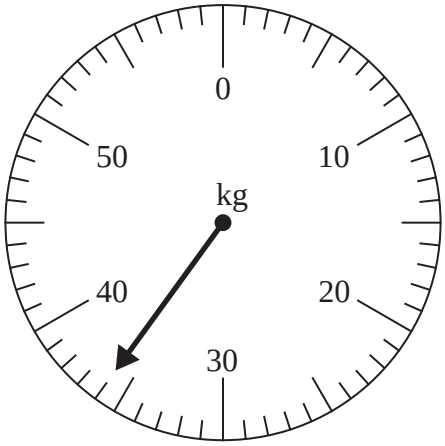
(1)

£ 36

(Total for Question 19 is 3 marks)

20 Amir is going on holiday.

He weighs his suitcase on the weighing scales at the airport.
The reading on the scale gives the weight of Amir's suitcase.



An excess luggage charge has to be paid when the weight of a suitcase is greater than 25 kg.
This charge is 7.45 euros for each kilogram over the 25 kg limit.

Work out the excess luggage charge that Amir has to pay.

Amir's luggage weight = 36 kg

36 - 25 = 11 kg

11 x 7.45 euros = 81.95

(2)

81.95 (1) ..... euros

(Total for Question 20 is 3 marks)

21 Pieter owns a currency conversion shop.

Last Monday, Pieter changed a total of 20 160 rand into a number of different currencies.

He changed $\frac{3}{10}$ of the 20 160 rand into euros.

He changed the rest of the rands into dollars, rupees and francs in the ratios 9 : 5 : 2

Pieter changed more rands into dollars than he changed into francs.

Work out how many more.

$9 + 5 + 2 = 16$

$\frac{7}{10} \times 20160 = 14\,112$ rands (1)

$14\,112 \div 16 = 882$ (1)

$9 - 2 = 7$ (Difference between dollars and francs)

$7 \times 882 = 6174$ rands (1)

(1)

6174 rand

(Total for Question 21 is 4 marks)

22 Bella and Millie share some money in the ratio 5 : 2

Bella receives 10.50 euros more than Millie.

Work out the total amount of money they share.

Total ratio = 7

Difference in ratio = 3

$\frac{10.50}{3} = 3.50$ (1)

Total amount they share = 3.50×7 (1)

$= 24.50$ (1)

24.50 ..... euros

(Total for Question 22 is 3 marks)

23 Jordan buys 256 notebooks.

He buys the notebooks in packs of 8 notebooks.
Each pack of 8 notebooks costs £2.48

Work out how much the 256 notebooks cost Jordan.

Finding how many packs Jordan buys :

$\frac{256}{8} = 32$ packs

Price he pays : 32×2.48

$= 79.36$

£ 79.36

(Total for Question 23 is 3 marks)

24 Sandeep buys some flowers.
He has 5000 rupees to spend.

He buys 6 carnations at 220 rupees each.
He also buys some roses at 295 rupees each.

Sandeep should receive 140 rupees in change from his 5000 rupees.

Work out how many roses Sandeep buys.

Carnations : $6 \times 220 = 1320$ (1)

Roses : $5000 - 1320 = 3680$ (1)

$(3680 - 140) \div 295 = 12$ roses
(1) (1)

12

(Total for Question 24 is 4 marks)

25 Here are two special offers for buying dog food.

Special offer A	**Special offer B**
Normally $1.40 a tin **Special offer** Buy 1 tin, get 1 tin half price	Normally pack of 6 tins for $7.20 **Special offer** 20% off each pack of 6 tins

Gaspar buys 24 tins of dog food using special offer **A**.
Anna buys 24 tins of dog food using special offer **B**.

Work out the difference between the amount that Gaspar pays and the amount that Anna pays.

A : $12 \times 1.40 + 12 \times 0.5 \times 1.40 = 25.20$ (1)

B : $\frac{80}{100} \times 4 \times 7.20 = 23.04$ (1)

A − B : $25.20 - 23.04$ (1)

$= 2.16$ (1)

$ 2.16

(Total for Question 25 is 4 marks)

26 Thabisa is organising a trip to the theatre.

The cost of a ticket for each adult is £11.75
The total cost of the tickets for 12 adults and 5 children is £181

Work out the cost of a ticket for each child.

Adult : $12 \times 11.75 = 141$ (1)

Each child : $\frac{181 - 141}{5}$ (1)

$= 8.00$ (1)

£ 8.00

(Total for Question 26 is 3 marks)

27 The diagram shows a classroom wall in the shape of a trapezium.

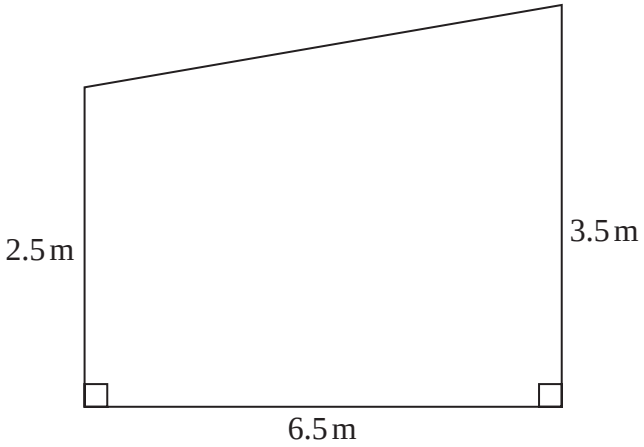


Diagram **NOT** accurately drawn

Dion wants to paint the classroom wall completely twice.
He knows that each tin of paint will cover $12\,m^2$

He is going to have to buy all the paint he needs.

Work out the least number of tins of paint that Dion will need to buy.
Show your working clearly.

Area : $\frac{1}{2} \times 6.5 \times (2.5 + 3.5)$ (2)

: 19.5

$19.5 \times 2 = 39$

$39 \div 12 = 3.25$ (1)

≈ She needs 4 tins of paint (1)

4

(Total for Question 27 is 4 marks)

28 Here is a list of the ingredients needed to make 12 chocolate brownies.

Chocolate brownies Ingredients for 12 brownies
150 g flour
250 g chocolate spread
3 eggs

Thalia buys exactly enough of these ingredients to make 120 of these brownies.

1.5 kg of flour costs £1.30
500 g of chocolate spread costs £2.60
6 eggs cost £1.10

Thalia sells all 120 brownies at £0.40 each.

Work out the profit that she makes.

To make 120 brownies :

flour : 150 g × 10
= 1500 g

chocolate : 250 g × 10
= 2500 g

egg : 3 × 10
= 30 eggs

Cost :

flour : 1500 g = £1.30 (1)

chocolate : $\frac{2500\text{ g}}{500\text{ g}}$ × £2.60
= 5 × £2.60
= £13 (1)

egg : $\frac{30}{6}$ × £1.10
= £5.50

Total cost : 1.30 + 13 + 5.50
= 19.80

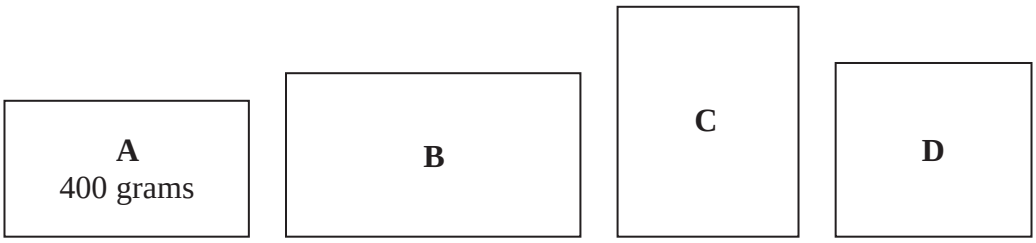
Total sold : 120 × 0.40 (1)
= 48

Profit : 48 − 19.80 (1)
= 28.20 (1)

£ 28.20

(Total for Question 28 is 5 marks)

29 Pat has 4 parcels **A**, **B**, **C** and **D**



The weight of parcel **A** is 400 grams.

The weight of parcel **B** is 350 grams more than the weight of parcel **A**
The weight of parcel **C** is twice the weight of parcel **A**

The total weight of the 4 parcels is 2.5 kilograms.

Work out the weight, in grams, of parcel **D**

2.5 kg × 1000 = 2500 g (1)

B = 400 + 350 = 750 g (1)

C = 2 × 400 = 800 g

D = 2500 − 400 − 750 − 800 (1)

= 550 g (1)

550 grams

(Total for Question 29 is 4 marks)

30 Luca has 5 kg of chopped tomatoes.
He also has some empty tins.

When full, each tin holds 350 g of chopped tomatoes.

Luca fills as many tins as possible with the chopped tomatoes.

Work out the weight of the chopped tomatoes remaining after Luca has filled as many tins as possible.
Give the units of your answer.

$5\text{ kg} \times 1000 = 5000\text{ g}$ (1)

$\frac{5000}{350} = 14.2857\ldots$

≈ 14 (1)

$350\text{ g} \times 14 = 4900\text{ g}$ (1)

$5000\text{ g} - 4900\text{ g} = 100\text{ g}$ (1)

100 g

(Total for Question 30 is 4 marks)

31 Orange squash is made from orange juice and water.

Sean has two different cartons of orange squash, carton **P** and carton **Q**.
The table gives information about the two cartons.

Carton P	Carton Q
Total volume of orange squash is 250 millilitres 30% of the total volume is **orange juice** and the remainder is water	Total volume of orange squash is 250 millilitres 160 millilitres of the total volume is **water** and the remainder is orange juice

Work out the difference in the volume of orange juice in carton **P** and the volume of orange juice in carton **Q**.

P : $\frac{30}{100} \times 250 = 75$ (1)

Q : $250 - 160 = 90$

$90 - 75 = 15$ (1)

(1)

15

..... millilitres

(Total for Question 31 is 3 marks)

32 Niran is organising a baking competition and needs to buy 9.25 kilograms of flour.

Flour is sold in bags that each contain 750 grams of flour.
Each of these bags costs 58 Baht.
Niran can only buy whole bags of flour.

Niran buys the least number of bags of flour that he needs.

Work out the cost of the flour that he buys.

$9.25 \times 1000 = 9250$ g (1)

No. of bags needed $= \frac{9250 \text{ g}}{750 \text{ g}} = 12.333...$

$=$ 13 bags needed (1)

Total cost $= 13 \times 58$ (1)

$= 754$ (1)

754 ..... Baht

(Total for Question 32 is 4 marks)

33 Haneul buys 120 packs of cherries.
Each pack of cherries that Haneul buys costs 28 Malaysian ringgits.

Haneul sells $\frac{4}{5}$ of the 120 packs of cherries.

He sells each of these packs for 46 Malaysian ringgits.

The remaining packs are unsold.

Work out Haneul's total profit.

Total sold : $\frac{4}{5} \times 120 = 96$ packs (1)

$96 \times 46 = 4416$ Malaysian ringgits (1)

Total price he bought : $120 \times 28 = 3360$ Malaysian ringgits

Profit : $4416 - 3360 = 1056$ (1) (1)

1056 Malaysian ringgits

(Total for Question 33 is 4 marks)

34 One month, Abbad raised money for charity by being sponsored to run and to walk.
His target was to raise 700 dirhams.

During the month, Abbad recorded a total distance of 135 km by running and by walking.
The ratio

number of km he ran : number of km he walked = 2 : 7

Abbad received 8 dirhams for each km he ran and 5 dirhams for each km he walked.

Abbad raised more money than his 700 dirhams target.

How much more?

Total ratio : $2 + 7 = 9$

distance he ran : $\frac{2}{9} \times 135 = 30$ km (1)

distance he walked : $\frac{7}{9} \times 135 = 105$ km (1)

Money raised : $30 \times 8 + 105 \times 5$

$= 240 + 525$

$= 765$ (1)

difference : $765 - 700$

$= 65$ (1)

65 ..... dirhams

(Total for Question 34 is 4 marks)

35 Sandeep wants to buy some packets of pens and some boxes of pencils for his stationery shop.

Each packet of pens contains 9 pens.
Each box of pencils contains 12 pencils.

Each packet of pens costs £7.60
Each box of pencils costs £4.80

Sandeep can only buy full packets of pens and full boxes of pencils.
He wants to buy exactly the same number of pens as pencils.

Work out the minimum amount Sandeep needs to pay.

Multiples of 9 and 12 :

pens : 9 , 18 , 27 , (36) (4 packets)

pencils : 12 , 24 , (36) (1) (3 boxes)

4 (7·60) + 3 (4·80) (1)

= 30·40 + 14·40 (1)

= 44·80 (1)

44·80

£.....

(Total for Question 35 is 4 marks)

36 Pablo buys some tickets to go to the theatre.

3 of the tickets are for adults.
The remaining tickets are for children.

Each adult ticket costs 12 euros.
The children's tickets each cost 30% less than an adult ticket.

The total amount of money that Pablo pays for all the tickets is 94.80 euros.

Find the number of children's tickets Pablo buys.

price of each children's ticket : $0.7 \times 12 = 8.40$ (1)

∴ let no. of children's ticket = x

$$3(12) + 8.40x = 94.80$$

$$8.40x = 94.80 - 36$$

$$8.40x = 58.80 \quad (1)$$

$$x = \frac{58.80}{8.40} \quad (1)$$

$$= 7 \quad (1)$$

7

(Total for Question 36 is 4 marks)