

**RATIO**

**Pearson Edexcel - Tuesday 19 May 2020 - Paper 1 (Non-Calculator) Foundation Tier**

1.

9 (a) A bag contains red counters and blue counters only.

number of red counters : number of blue counters = 3 : 4

Write down the fraction of the counters that are red.

.....  
(1)

(b) Write the ratio 12 : 30 in the form 1 :  $n$

.....  
(2)

**(Total for Question 9 is 3 marks)**

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**Pearson Edexcel - Thursday 4 June 2020 - Paper 2 (Calculator) Foundation Tier**

2.

20 Pens and pencils are sold in a shop.

12 pencils cost £1.80

The ratio of the cost of a pen to the cost of a pencil is 7 : 3

Work out the cost of 5 pens.

£.....

**(Total for Question 20 is 4 marks)**

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3.

27 A shop sells packs of black pens, packs of red pens and packs of green pens.

There are

2 pens in each pack of black pens

5 pens in each pack of red pens

6 pens in each pack of green pens

On Monday,

number of packs of black pens sold : number of packs of red pens sold : number of packs of green pens sold = 7:3:4

A total of 212 pens were sold.

Work out the number of green pens sold.

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(Total for Question 27 is 4 marks)

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**Pearson Edexcel - Thursday 6 June 2019 - Paper 2 (Calculator) Foundation Tier**

4.

**26** £360 is shared between Abby, Ben, Chloe and Denesh.

The ratio of the amount Abby gets to the amount Ben gets is 2 : 7

Chloe and Denesh each get 1.5 times the amount Abby gets.

Work out the amount of money that Ben gets.

£ .....

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**(Total for Question 26 is 4 marks)**

**Pearson Edexcel - Tuesday 11 June 2019 - Paper 3 (Calculator) Foundation Tier**

5.

**12** Ali, Ben and Cathy share an amount of money in the ratio 6 : 9 : 10

What fraction of the money does Ben get?

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**(Total for Question 12 is 2 marks)**

6.

**23** Costcorp sells packets of mints to shop owners.

On Monday three shop owners buy mints from Costcorp.

Each shop owner buys small packets, medium packets and large packets of mints.

Alan buys 400 packets of mints.

32% are small packets.

40% are large packets.

Beryl buys 500 packets of mints.

$\frac{3}{10}$  are small packets.

$\frac{1}{10}$  are large packets.

Charlie buys 150 small packets of mints so that

number of small packets : number of medium packets = 3 : 4

Work out the total number of medium packets of mints these shop owners buy.

You must show all your working.

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(Total for Question 23 is 5 marks)

7.

15 Shahid is going to use these instructions to make a fizzy drink.

Mix 5 parts of orange juice  
with 2 parts of lemonade

Shahid thinks that he has 300 ml of orange juice and 200 ml of lemonade.

(a) If Shahid is correct, what is the greatest amount of fizzy drink he can make?

..... ml  
(3)

Shahid has 300 ml of orange juice but he only has 160 ml of lemonade.

(b) Does this affect the greatest amount of fizzy drink he can make?  
Give a reason for your answer.

.....  
.....  
.....  
(1)

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(Total for Question 15 is 4 marks)

8.

**20** In a village

the number of houses and the number of flats are in the ratio 7 : 4

the number of flats and the number of bungalows are in the ratio 8 : 5

There are 50 bungalows in the village.

How many houses are there in the village?

.....  
**(Total for Question 20 is 3 marks)**

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9.

16 Alan, Bispah and Chan share a sum of money.

Alan gets  $\frac{1}{8}$  of the money.

Bispah gets  $\frac{1}{2}$  of the money.

Chan gets the rest of the money.

Alan gets £2.50

(a) Work out how much money Bispah gets.

£.....  
(2)

- (b) Find the ratio  
amount of money Alan gets : amount of money Chan gets
- Give your answer in the form  $a:b$  where  $a$  and  $b$  are whole numbers.

.....  
(3)

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**(Total for Question 16 is 5 marks)**

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10.

18 Harry, Regan and Kelan share £450 in the ratio 2 : 5 : 3

How much money does Kelan get?

£.....

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(Total for Question 18 is 2 marks)

11.

24 Kiaria is 7 years older than Jay.

Martha is twice as old as Kiaria.

The sum of their three ages is 77

Find the ratio of Jay's age to Kiaria's age to Martha's age.

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(Total for Question 24 is 4 marks)

**Pearson Edexcel - Monday 6 November 2017 - Paper 2 (Calculator) Foundation Tier**

12.

6 Annie and Lily share some money in the ratio 4 : 3

(a) What fraction of the money does Lily get?

.....  
(1)

Rosie and Dan share some sweets.

Dan gets  $\frac{1}{4}$  of the sweets.

(b) Write down the ratio of the number of sweets Rosie gets to the number of sweets Dan gets.

.....  
(1)

.....  
**(Total for Question 6 is 2 marks)**  
.....

**Pearson Edexcel - Wednesday 8 November 2017 - Paper 3 (Calculator) Foundation Tier**

13.

10 Jim thinks of a number.

$\frac{2}{3}$  of Jim's number is 48

Work out  $\frac{5}{6}$  of Jim's number.

.....  
**(Total for Question 10 is 2 marks)**

14.

12 2.5 kg of apples cost £3.60

Work out the cost of 3.5 kg of apples.

£.....

**(Total for Question 12 is 2 marks)**

15.

15 The ratio of the cost of one metre of cotton fabric to the cost of one metre of silk fabric is 2 : 5

Complete the table of costs.

	2 m	6 m	8 m	9 m
cotton fabric	£6			
silk fabric				

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(Total for Question 15 is 3 marks)

16.

22 There are only blue pens, green pens and red pens in a box.

The ratio of the number of blue pens to the number of green pens is 2 : 5

The ratio of the number of green pens to the number of red pens is 4 : 1

There are less than 100 pens in the box.

What is the greatest possible number of red pens in the box?

.....  
**(Total for Question 22 is 3 marks)**

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**Pearson Edexcel – Specimen 2 - Paper 1 (Non-Calculator) Foundation Tier**

17.

8 8 identical pens cost £12

Work out the cost of 10 of these pens.

£.....

**(Total for Question 8 is 2 marks)**

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18.

**12** Helen has 80 books to sell.

Each book is Fiction or Non-fiction.

The ratio of the number of Fiction books to the number of Non-fiction books is 3:1

Each book has a normal price of £10

Helen reduces the price of all the Non-fiction books.

<p><b>Non-fiction</b></p> <p>All books ½ price</p>
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Helen sells all 80 books.

Work out the total amount of money Helen will receive.

£.....

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**(Total for Question 12 is 4 marks)**

**Pearson Edexcel – Specimen 2 - Paper 2 (Calculator) Foundation Tier**

19.

**18** There are 64 cards in a pack.

Each card is either red or black.

The ratio of the number of red cards to the number of black cards is 1 : 1

8 red cards are removed from the pack.

Find the ratio of the number of red cards now in the pack to the number of black cards now in the pack.

Give your answer in its simplest form.

.....  
**(Total for Question 18 is 3 marks)**

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20.

**27** On a farm

the number of cows and the number of sheep are in the ratio 6 : 5

the number of sheep and the number of pigs are in the ratio 2 : 1

The total number of cows, sheep and pigs on the farm is 189

How many sheep are there on the farm?

.....  

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**(Total for Question 27 is 3 marks)**



**Pearson Edexcel – Specimen 2 - Paper 3 (Calculator) Foundation Tier**

21.

- 22 The ratio of the number of boys to the number of girls in a school is 4:5  
There are 95 girls in the school.

Work out the total number of students in the school.

.....  
**(Total for Question 22 is 3 marks)**

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**Pearson Edexcel – Sample Paper 1 (Non-Calculator) Foundation Tier**

22.

- 25 In a company, the ratio of the number of men to the number of women is 3:2

40% of the men are under the age of 25

10% of the women are under the age of 25

$$\frac{3}{5} \quad \frac{2}{5}$$

What percentage of all the people in the company are under the age of 25?

60% men      40% women

40% of 60%

$$= \underline{24\%}$$

10% of 40%

$$= \underline{4\%}$$

.....  
28 %

.....  
**(Total for Question 25 is 4 marks)**

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23.

27 There are 1200 students at a school.

Kate is helping to organise a party.  
She is going to order pizza.

Kate takes a sample of 60 of the students at the school.  
She asks each student to tell her **one** type of pizza they want.

The table shows information about her results.

Pizza	Number of students
ham	20
salami	15
vegetarian	8
margarita	17

Work out how much ham pizza Kate should order.

Write down any assumption you make **and** explain how this could affect your answer.

$$\frac{20}{60} = \frac{1}{3}$$

$$\frac{1}{3} \text{ of } 1200 = \underline{\underline{400}}$$

Assuming students are going to eat  
one whole pizza each, if they want  
to eat less the answer would decrease.  
(Total for Question 27 is 3 marks)

OCR – Tuesday 03 November 2020- Morning - Paper 1 (Calculator) Foundation Tier

24. 7 (a) Divide 72 in the ratio 4 : 5.

(a) ..... : ..... [2]

(b) In one year, Clara and Dave borrowed books from a library in the ratio 3 : 7.  
Dave borrowed 35 books.

Work out the number of books borrowed by Clara.

(b) ..... [2]

25.

20 James is taking three examination papers in Spanish.  
Here are his first two results.

Paper 1:  $\frac{43}{80}$

Paper 2:  $\frac{38}{65}$

Paper 3 is out of 95.

The marks in each of the three papers are added together.

Find the lowest mark that James needs in Paper 3 to achieve 60% of the total marks.

**OCR Monday 11 November 2019 – Afternoon (Calculator) Foundation Tier**

26.

- 9 Tom buys a radio for £40.  
Later he sells it and makes a profit of 20%.

Tom says

The ratio of the price I paid for the radio to the price I sold the radio is 5 : 6.

Show that Tom is correct.

[3]

**OCR Tuesday 21 May 2019 – Morning (Calculator) Foundation Tier**

27.

- 19 (a) Anne, Barry and Colin share a prize in the ratio 3 : 4 : 5.  
Colin gives  $\frac{1}{3}$  of his share to a charity.

What fraction of the whole prize does Colin give to the charity?

(a) ..... [3]

- (b) Delia, Edwin and Freya share some money in the ratio 5 : 7 : 8.  
Freya's share is £1600.

How much money did they share?

(b) £ ..... [2]

**OCR Tuesday 6 November 2018 – Morning (Calculator) Foundation Tier**

28.

5 (a) Write 3 : 57 as a ratio in its simplest form.

(a) ..... : ..... [1]

(b) Bob and Chris share some money in the ratio 2 : 3.  
Bob receives £8.

Work out how much Chris receives.

(b) £ ..... [2]

OCR Thursday 8 November 2018 – Morning (Non-Calculator) Foundation Tier

29.

11 Some biscuits contain only three ingredients: flour, butter and sugar.

- The ratio of flour to butter is 5 : 4.
- The ratio of butter to sugar is 2 : 1.
- The total weight of the flour, butter and sugar is 770 g.

Work out the weight of each of the ingredients.

Flour ..... g

Butter ..... g

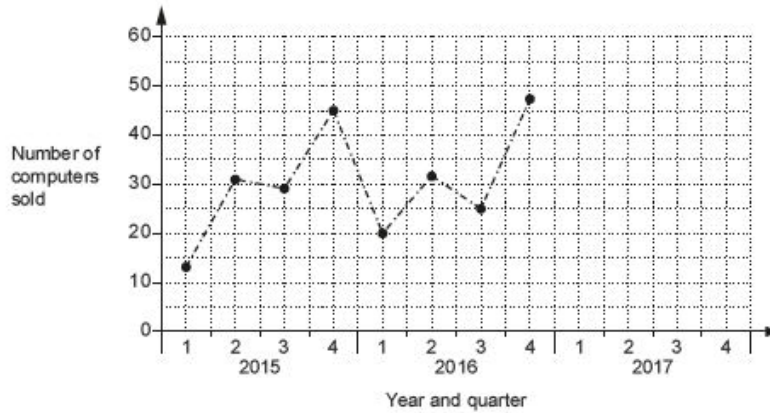
Sugar ..... g [4]

30.

20 The table shows the number of computers sold in Tom's shop each quarter from 2015 to 2017.

	2015				2016				2017			
Quarter	1	2	3	4	1	2	3	4	1	2	3	4
Number of computers sold	13	31	29	45	20	32	25	47	27	40	30	58

(a) Complete this graph using the information for 2017.



[2]

(b) Tom adds the three results for quarter 1 and he adds the three results for quarter 4.  
Tom says

The ratio of the total number of computers sold in quarter 1 compared to quarter 4 is 2 : 5.

Is he correct?  
Show your reasoning.

..... [2]

(c) Make two comments about Tom's sales over the period 2015 to 2017.

Comment 1 .....

.....

Comment 2 .....

..... [2]

(d) Tom predicts that he will sell more than 60 computers in the 4<sup>th</sup> quarter of 2018.

What assumption has he made?

.....

..... [1]

**OCR Monday 24 May 2018 – Morning (Calculator) Foundation Tier**

31.

- 5 (a) Write 12:54 as a ratio in its simplest form.

(a) ..... : ..... [2]

- (b) The ratio 400 g : 1 kg can be written in the form 1 :  $n$ .

Find the value of  $n$ .

(b)  $n =$  ..... [2]

- (c) Amanda and Wim share some money in the ratio 2:5.  
Wim receives £115.

Calculate how much money was shared.

(c) £ ..... [3]



OCR Thursday 7 June 2018 – Morning (Non Calculator) Foundation Tier

32.

- 9 (a) Elise wants to divide a sum of money between Hannah and Adil in the ratio 2 : 3.

Elise says:

Hannah will get  $\frac{2}{3}$  of the money.

Explain why Elise is not correct.

.....  
..... [1]

- (b) George has a different sum of money.  
He divides the money between Siobhan and Iwan.

Iwan receives  $\frac{11}{17}$  of the money.

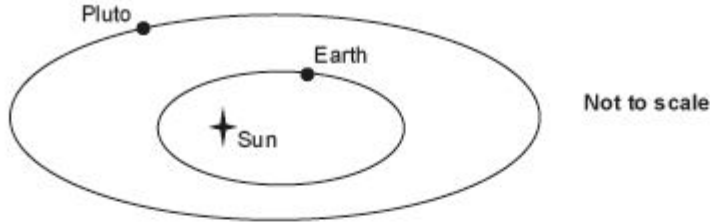
Write the ratio of the money that Siobhan receives to the money that Iwan receives.

(b) ..... : ..... [1]

OCR Tuesday 12 June 2018– Morning (Calculator) Foundation Tier

33.

- 22 Earth and Pluto go around the Sun.  
Their distance to the Sun varies.



The table shows the closest distance that Earth and Pluto get to the Sun.

	Closest distance to the Sun (km)
Earth	$1.47 \times 10^8$
Pluto	$4.44 \times 10^9$

- (a) Show that the closest distance of Pluto to the Sun is roughly 30 times the closest distance of Earth to the Sun. [2]

- (b) Give a reason why we cannot use this information to say

The distance of Pluto to the Sun is always 30 times the distance of Earth to the Sun.

.....  
..... [1]

**OCR Thursday 2 November 2017– Morning (Calculator) Foundation Tier**

34.

- 12** Leo, Kush and Mai share some money in the ratio 3 : 5 : 8.  
Kush receives £750 more than Leo.

Calculate the total amount of money that they shared.

£ ..... [4]

**OCR Monday 6 November 2017– Morning (Calculator) Foundation Tier**

35.

19 The angles in a triangle are in the ratio 1 : 2 : 3.

(a) Show that the triangle is a right-angled triangle.

[2]

(b) The hypotenuse of the triangle is 15 cm long.

Calculate the length of the shortest side in the triangle.

(b) ..... cm [4]

36.

20 There is a total of 250 men, women and children on a train.  
The ratio of men to women is 4 : 5.  
The ratio of women to children is 10 : 7.

How many men are on the train?

..... [4]

**Pearson Edexcel – Sample Papers - Paper 1 (Non-Calculator) Foundation Tier**

37.

**10** There are only black pens and green pens in a box.

The ratio of the number of black pens in the box to the number of green pens in the box is 2 : 5

What fraction of the pens are black?

**Pearson Edexcel –Sample Papers - Paper 2 (Calculator) Foundation Tier**

38.

**23** Frank, Mary and Seth shared some sweets in the ratio 4 : 5 : 7

Seth got 18 more sweets than Frank.

Work out the total number of sweets they shared.

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**(Total for Question 23 is 3 marks)**

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OCR Wednesday 8 November 2017– Morning (Calculator) Foundation Tier

39.

- 6 (a) Lucy and Ben share £42.  
Lucy's share is £30.

Write the ratio Lucy's share : Ben's share in its simplest form.

(a) ..... : ..... [2]

- (b) The ratio 2.5 metres to 70 centimetres can be written in the form  $1 : n$ .

Find the value of  $n$ .

(b)  $n =$  ..... [2]

- (c) Water flows at a steady rate from a tap.  
It takes 50 seconds to fill a 5 litre watering can from this tap.

The rate at which water flows from the tap is halved.

- (i) Complete.

5 litres = .....  $\text{cm}^3$  [1]

- (ii) Find the rate at which the water is **now** flowing from the tap.  
Give your answer in cubic centimetres per second ( $\text{cm}^3/\text{s}$ ).

(ii) .....  $\text{cm}^3/\text{s}$  [2]

40.

**16 (a)** Two bags each contain only red counters and yellow counters.

In Bag A, the ratio of red counters to yellow counters is 1 : 4.

In Bag B,  $\frac{1}{4}$  of the counters are red.

**(i)** Sharon says

The proportion of the counters that are red is the same in both bags.

Explain why Sharon is not correct.

.....

.....

..... **[1]**

**(ii)** The number of counters in the two bags is the same.

Complete the table below to show how many counters of each colour could be in the bags.

	Red counters	Yellow counters
Bag A		
Bag B		

**[3]**

- (b) In another bag, Bag C, the ratio of red counters to yellow counters is 3 : 4.  
If 3 of the red counters are removed from Bag C, the ratio of red counters to yellow counters is 3 : 5.

How many **yellow** counters are in Bag C?

(b) ..... [3]

**OCR Wednesday 8 November 2017– Morning (Calculator) Foundation Tier**

41.

- 20 The middle number of three consecutive whole numbers is  $2a$ .

Prove that the sum of these three numbers cannot be 250.

[3]



OCR Thursday 25 May 2017 – Morning (Calculator) Foundation Tier

42.

13 (a) The ratio 20 minutes to 1 hour can be written in the form  $1:n$ .

Find the value of  $n$ .

(a)  $n = \dots\dots\dots$  [1]

(b) The scale on a map is  $1:25\,000$ .

How many kilometres on the ground is represented by 6 cm on the map?

(b)  $\dots\dots\dots$  km [3]

(c) Kiri and Peter share some sweets in the ratio  $6:7$ .

What fraction of the sweets does Kiri receive?

(c)  $\dots\dots\dots$  [1]

OCR Thursday 8 June 2017 – Morning (Non - Calculator) Foundation Tier

43.

19 The population of a village is in the following ratios.

- men : children = 11 : 3
- women : children = 5 : 2

(a) Find the ratio men : women.  
Give your answer in its simplest form.

(a) ..... : ..... [2]

(b) There are 36 children in the village.

Find the total population of the village.

(b) ..... [3]

**OCR Sample Question Paper 1 – Morning/Afternoon (Calculator) Foundation Tier**

44.

- 1 (a) Write 40 : 2000 as a ratio in its simplest form.

(a) ..... : ..... [2]

- (b) Two people share £350 in the ratio 1 : 6.

Calculate each share.

(b) £ ..... £ ..... [2]

- (c) Find 20% of 450.

(c) ..... [2]

**OCR Sample Question Paper 3 – Morning/Afternoon (Calculator) Foundation Tier**

45.

- 5 Darren says

I can run 100m in 15 seconds, so I should be able to run 800m in 120 seconds.

Do you think that he would take more or less than 120 seconds to run 800m?

Explain your answer, with reference to any assumptions Darren has made.

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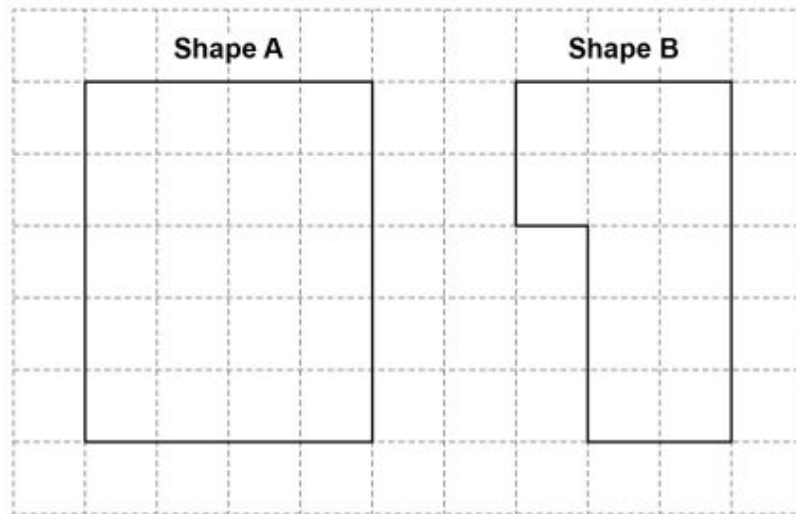
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.....

..... [3]

46.

5



Work out area of Shape A : area of Shape B

Give your answer in its simplest form.

**[2 marks]**

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Answer \_\_\_\_\_ :

47.

**24**

The cost of a holiday is £2400

Rana pays a deposit followed by monthly payments, in the ratio

deposit : total of the monthly payments = 3 : 5

She makes 6 equal monthly payments.

Work out her monthly payment.

**[4 marks]**

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Answer £ \_\_\_\_\_

AQA Thursday 4 June 2020 – Morning (Calculator) Foundation Tier

48.

1 Circle the ratio that is the same as 3 : 4

[1 mark]

6 : 7

6 : 8

6 : 9

6 : 16

49.

18

Kim buys pet food in 1.5 kg packs.

Her pet needs 0.8 kg of food each week.

She wants to have enough food for the next 14 weeks.

She already has two 1.5 kg packs.

Work out the smallest number of packs she needs to buy.

You **must** show your working.

[4 marks]

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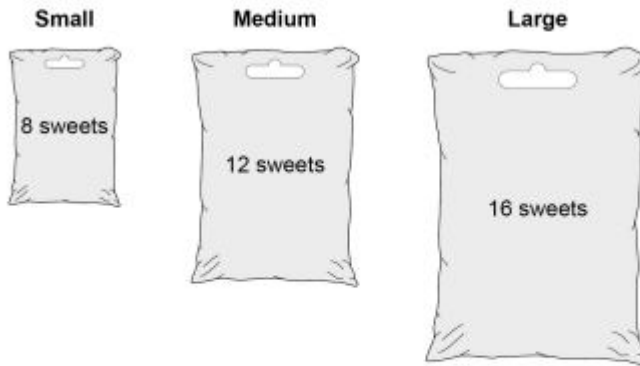
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Answer \_\_\_\_\_

50.

21 Jill puts 440 sweets into small bags, medium bags and large bags.



She uses

30 small bags

twice as many medium bags as large bags.

There are no sweets left over.

For the number of bags, work out the ratio small : medium : large

**[4 marks]**

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Answer \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_

51.

27

At a party there are 90 people.  
48 are women and 42 are men.

Some women leave.

Some men arrive.

The ratio of women to men is now 10 : 11

Are there now more than 90 people at the party?

Tick **one** box.

Yes

No

Cannot tell

Show working to support your answer.

**[2 marks]**

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AQA Monday 8 June 2020 – Morning (Calculator) Foundation Tier

52.

**23**  $a$  is two times  $b$ .

Circle the ratio  $a : b$

**[1 mark]**

1 : 3

3 : 1

1 : 2

2 : 1

AQA Tuesday 21 May 2019 – Morning (Non-Calculator) Foundation Tier

53.

17 (a) Simplify fully  $56 : 24$  [2 marks]

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Answer \_\_\_\_\_ : \_\_\_\_\_

17 (b) Write the ratio  $5 : 4$  in the form  $n : 1$  [1 mark]

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Answer \_\_\_\_\_ : \_\_\_\_\_

17 (c) Share £180 in the ratio  $1 : 9$  [2 marks]

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Answer £ \_\_\_\_\_ and £ \_\_\_\_\_

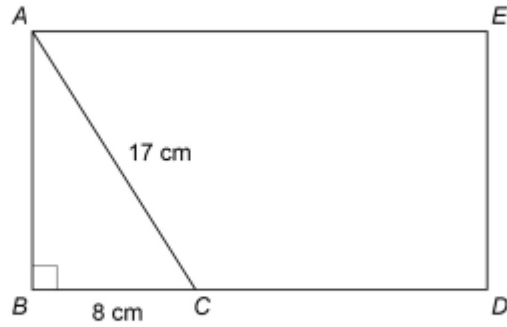
AQA Thursday 6 June 2019 – Morning (Calculator) Foundation Tier

54.

22 The diagram shows rectangle  $ABDE$  and right-angled triangle  $ABC$ .

$AC = 17$  cm

$BC = 8$  cm



Not drawn accurately

$BC : CD = 1 : 2$

Work out the area of rectangle  $ABDE$ .

[4 marks]

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Answer \_\_\_\_\_  $\text{cm}^2$

55.

27 Here are two sets of numbers, A and B.

**Set A**

200	160
104	100

**Set B**

270	400	483
300	$x$	

mean of Set A : mean of Set B = 3 : 8

Work out the value of  $x$ .

**[4 marks]**

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Answer \_\_\_\_\_

AQA Tuesday 6 November 2018 – Morning (Non-Calculator) Foundation Tier

56.

**16**      $a : b = 1 : 6$

$a : c = 3 : 1$

How many times bigger is  $b$  than  $c$ ?

**[2 marks]**

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Answer \_\_\_\_\_

AQA Thursday 8 November 2018 – Morning (Calculator) Foundation Tier

57.

18 There are 240 cows on a farm.

18 (a) On the farm,

number of bulls : number of cows = 1 : 30

How many bulls are there?

[1 mark]

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Answer \_\_\_\_\_

18 (b) Assume

the 240 cows produce milk for 10 months each year

each cow produces an average of 25 litres of milk per **day**.

Estimate the total milk production, in litres, of the 240 cows in one year.

You **must** show your working.

[4 marks]

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Answer \_\_\_\_\_ litres

**AQA Monday 12 November 2018 – Morning (Calculator) Foundation Tier**

58.

**19** A forest has 6500 trees.

The trees are beech or maple.

number of beech : number of maple = 1.6 : 1

**19 (a)** What fraction of the trees are beech?

**[2 marks]**

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Answer \_\_\_\_\_

**19 (b)** Write number of beech : number of maple in the form 1 :  $n$

**[1 mark]**

Answer \_\_\_\_\_ : \_\_\_\_\_





**AQA Thursday 24 May 2018 – Morning (Non-Calculator) Foundation Tier**

60.

**24** Divide 405 in the ratio 4 : 11

**[3 marks]**

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Answer \_\_\_\_\_ and \_\_\_\_\_

**AQA Thursday 7 June 2018 – Morning (Calculator) Foundation Tier**

61.

**20**  $a : b = 5 : 2$

How many times larger is  $a$  than  $b$ ?

Circle your answer.

**[1 mark]**

0.4

1.5

2.5

3

AQA Thursday 7 June 2018 – Morning (Calculator) Foundation Tier

62.

26

Theo starts with savings of £18

James starts with no savings.

Each week from now,

Theo will save £4.50 and James will save £4

In how many weeks will Theo and James have savings in the ratio 15 : 8 ?

**[3 marks]**

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Answer \_\_\_\_\_

63.

- 11 (a)** Cards in a pack are red or blue in the ratio

$$\text{red : blue} = 2 : 3$$

What fraction of the cards are **red**?

Circle your answer.

**[1 mark]**

$$\frac{5}{6}$$

$$\frac{2}{3}$$

$$\frac{2}{5}$$

$$\frac{3}{5}$$

- 11 (b)** A different pack has 72 cards.

$\frac{5}{9}$  are yellow.

Work out the number of yellow cards.

**[2 marks]**

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Answer \_\_\_\_\_

AQA Monday 6 November 2017 – Morning (Calculator) Foundation Tier

64.

**19 (a)** Divide 120 in the ratio 1 : 4

**[2 marks]**

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Answer \_\_\_\_\_ :

**19 (b)** Write the ratio 7 : 4 in the form  $n : 1$

**[1 mark]**

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Answer \_\_\_\_\_ :

AQA Thursday 25 May 2017– Morning (Non-Calculator) Foundation Tier

65.

15

In a school show,

girls : boys = 1 : 1

girls who sing : girls who do not sing = 1 : 2

8 girls **sing** in the show.

How many students are in the show altogether?

**[3 marks]**

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Answer \_\_\_\_\_

AQA Thursday 8 June 2017– Morning (Calculator) Foundation Tier

66.

**16** The counters in a bag are red or blue.

One fifth of the counters are red.

Work out the ratio red counters : blue counters

Circle your answer.

**[1 mark]**

1 : 4

1 : 5

4 : 5

1 : 6

AQA Thursday 8 June 2017– Morning (Calculator) Foundation Tier

67.

**19** Ben and Katy throw darts at a target.

Ben's ratio of hits to misses is 5 : 1

Katy's ratio of hits to misses is 3 : 1

Ben says,

"5 is bigger than 3, so I must have more hits than Katy."

Give an example to show that this might **not** be true.

**[2 marks]**

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AQA Tuesday 13 June 2017 Morning– Morning (Calculator) Foundation Tier

68.

17  $CD$  and  $PQ$  are lines of length 12 cm

17 (a)  $CE : CD = 1 : 2$

Mark point  $E$  on the line with a cross.

[1 mark]



17 (b)  $PR : RQ = 1 : 3$

Mark point  $R$  on the line with a cross.

[1 mark]



AQA Tuesday 13 June 2017 Morning– Morning (Calculator) Foundation Tier

69.

- 21** Purple paint is made by mixing red paint and blue paint in the ratio 5 : 2  
Yan has 30 litres of red paint and 9 litres of blue paint.

What is the **maximum** amount of purple paint he can make?

**[3 marks]**

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Answer \_\_\_\_\_ litres



AQA Sample Paper 1– Morning (Non-Calculator) Foundation Tier

70.

- 13 The table shows the ratio of teachers to children needed for two activities.

	teachers : children
Climbing	1 : 4
Walking	1 : 9

- 13 (a) There are 7 teachers to take children climbing.

What is the greatest number of children that can go climbing?

[1 mark]

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Answer \_\_\_\_\_

- 13 (b) 49 children want to go walking.

What is the smallest number of teachers needed?

[1 mark]

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Answer \_\_\_\_\_



AQA Sample Paper 2– Morning (Calculator) Foundation Tier

72.

**28** At a school

number of boys : number of girls = 9 : 7

There are 116 **more** boys than girls.

Work out the total number of students at the school.

**[3 marks]**

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Answer \_\_\_\_\_

**AQA Sample Paper 3– Morning (Calculator) Foundation Tier**

73.

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

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

**[2 marks]**

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Answer \_\_\_\_\_

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

How many squirrels are there altogether in Scotland?

**[2 marks]**

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Answer \_\_\_\_\_