Surname

Other Names

# **Mathematics**

# November 2018 Paper 1 (Non Calculator) Part 1 (First half of the paper) Edexcel Foundation Tier

Time: 45 minutes

Q	Topic	Max Mark	My Marks
1	Ordering Decimals (Place Value)	1	
2	Fractions, Decimals and Percentages	1	
3	Factors	1	
4	Rounding	1	
5	Powers, Order of Operations (BIDMAS)	3	
6	Fraction of Amount, Calculation Problem	3	
7	Pictograms	3	
8	Coordinates	3	
9	Substitution	2	
10	Prime Numbers	2	
11	Simplifying Fractions, Adding Fractions	3	
12	Real life Graphs	3	
13	Writing Ratio	2	
14	Angles, Shapes	4	
15	Sharing Ratio	4	
16	Similar Shapes	1	
17	Frequency Trees, Writing Probability	5	
	Total	42	

For worked solutions and video solutions visit mathsgenie.co.uk

### Answer ALL questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

1 Write the following numbers in order of size. Start with the smallest number.

0.4

0.02

0.37

0.152

0.2

# (Total for Question 1 is 1 mark)

2 Write 0.6 as a percentage.

......

#### (Total for Question 2 is 1 mark)

3 Here is a list of numbers.

3

5

7

12

15

18

20

From the list, write down a factor of 10

(Total for Question 3 is 1 mark)

4 Write 7829 to the nearest 1000

(Total for Question 4 is 1 mark)



5 (a) Work out  $3 \times 5 + 7$ 



(b) Work out 23



(c) Write brackets () in this statement to make it correct.

$$7 \times 2 + 3 = 35$$

(1)

(Total for Question 5 is 3 marks)

6 Sue has 2 cats.

Each cat eats  $\frac{1}{4}$  of a tin of cat food each day.

Sue buys 8 tins of cat food.

Has Sue bought enough cat food to feed her 2 cats for 14 days? You must show how you get your answer.

(Total for Question 6 is 3 marks)



7 There are only apple trees, cherry trees, pear trees and plum trees in an orchard.

The pictogram shows information about the numbers of apple trees, cherry trees and pear trees in the orchard.

Apple	
Cherry	
Pear	
Plum	

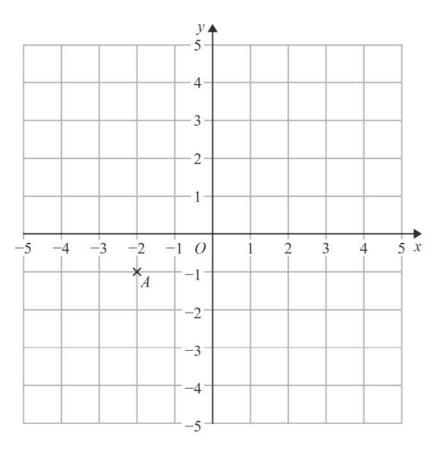
Key:	
	represents 4 trees

There is a total of 30 trees in the orchard.

Complete the pictogram.

(Total for Question 7 is 3 marks)

8



(a) Write down the coordinates of point A.

(1)

(b) On the grid, mark with a cross ( $\times$ ) the point (2, 3) Label this point B.

(1)

(c) On the grid, draw the line with equation x = -4

(1)

(Total for Question 8 is 3 marks)

$$g = 9$$
  
 $h = 4$ 

Work out the value of 2g + 3h

(Total for Question 9 is 2 marks)

10 Write down two prime numbers that have a sum of 32

(Total for Question 10 is 2 marks)

11 Here are some fractions.

$$\frac{9}{12}$$
  $\frac{6}{8}$   $\frac{18}{24}$   $\frac{10}{16}$   $\frac{15}{20}$ 

One of these fractions is **not** equivalent to  $\frac{3}{4}$ 

(a) Which fraction?

(b) Work out  $\frac{1}{12} + \frac{5}{6}$ 

(2)

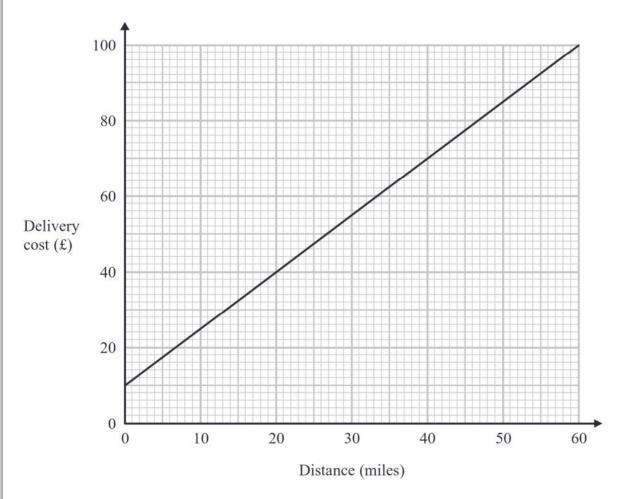
(1)

(Total for Question 11 is 3 marks)



## 12 Tom uses his lorry to deliver bricks.

You can use this graph to find the delivery cost for different distances.



For each delivery, there is a fixed charge plus a charge for the distance.

(a) How much is the fixed charge?

£ .....(1)

Tom makes two deliveries of bricks.

The distance of one delivery is 20 miles more than the distance of the other delivery.

(b) Work out the difference between the two delivery costs.

£ (2)

(Total for Question 12 is 3 marks)



13 Azmol, Ryan and Kim each played a game.

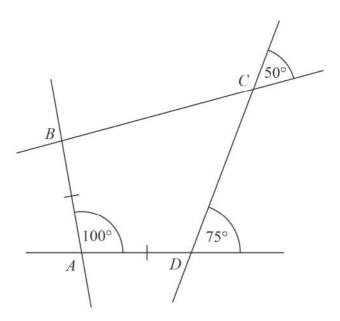
Azmol's score was four times Ryan's score. Kim's score was half of Azmol's score.

Write down the ratio of Azmol's score to Ryan's score to Kim's score.

(Total for Question 13 is 2 marks)



14 The diagram shows quadrilateral ABCD with each of its sides extended.



AB = AD

Show that ABCD is a kite.

Give a reason for each stage of your working.

(Total for Question 14 is 4 marks)

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?

	m
(3)	)

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

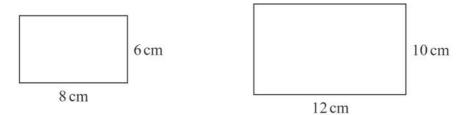
(b) Does this affect the greatest amount of fizzy drink he can make? Give a reason for your answer.

			- 8	

(Total for Question 15 is 4 marks)



16 Here are two rectangles.



Jim says,

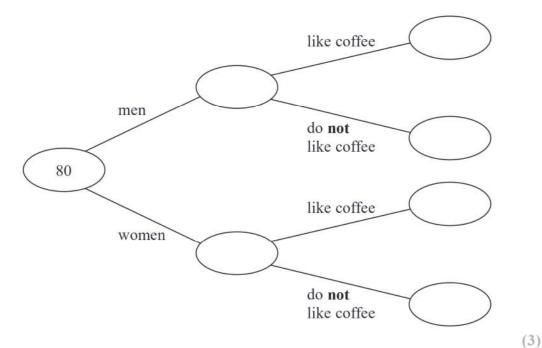
"The two rectangles are similar because 8 + 4 = 12 and 6 + 4 = 10"

Is Jim correct?

Explain your answer.

(Total for Question 16 is 1 mark)

- 17 80 people are asked if they like coffee.
  - 48 of these people are women.
  - 61 of the 80 people like coffee.
  - 8 of the men do not like coffee.
  - (a) Use this information to complete the frequency tree.



One of the people who like coffee is chosen at random.

(b) Find the probability that this person is a woman.

(2)

(Total for Question 17 is 5 marks)

