

Write your name here

Surname

Other Names

Mathematics

**November 2017 Paper 1 (Non Calculator)
Part 2 (Second half of the paper)
Edexcel Foundation Tier**

Time: 45 minutes

Q	Topic	Max Mark	My Marks
18	Sharing Ratio	2	
19	Proportion Recipe Problems	3	
20	Estimation	3	
21	Standard Form	3	
22	Adding Fractions, Negative Indices	3	
23	Product of Prime Factors	2	
24	Forming and Solving Equations	4	
25	Angles in Parallel Lines	4	
26	Area of a Circle	4	
27	Averages from Tables, Estimate the Mean	4	
28	Forming and Solving Equations	4	
29	Quadratic Graphs	1	
30	Reverse Percentages	2	
	Total	39	

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

How much money does Kelan get?

£.....

(Total for Question 18 is 2 marks)

19 Here is a list of ingredients for making 16 flapjacks.

Ingredients for 16 flapjacks

- 120 g butter
- 140 g brown sugar
- 250 g oats
- 2 tablespoons syrup

Jenny wants to make 24 flapjacks.

Work out how much of each of the ingredients she needs.

butter g

brown sugar g

oats g

syrup tablespoons

(Total for Question 19 is 3 marks)



P 4 9 3 4 7 A 0 1 3 2 4

20 Ami and Josh use a calculator to work out $\frac{595}{4.08^2 + 5.3}$

Ami's answer is 27.1115

Josh's answer is 271.115

One of these answers is correct.

Use approximations to find out which answer is correct.

(Total for Question 20 is 3 marks)

21 Work out $\frac{0.06 \times 0.0003}{0.01}$

Give your answer in standard form.

(Total for Question 21 is 3 marks)



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22 (a) Work out $\frac{2}{5} + \frac{1}{4}$

.....
(2)

(b) Write down the value of 2^{-3}

.....
(1)

(Total for Question 22 is 3 marks)

23 Write 36 as a product of its prime factors.

.....

(Total for Question 23 is 2 marks)



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.

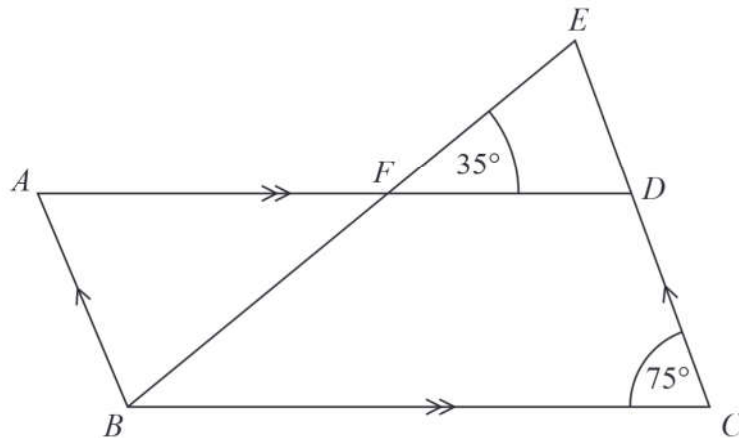
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(Total for Question 24 is 4 marks)

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$ABCD$ is a parallelogram.

EDC is a straight line.

F is the point on AD so that BFE is a straight line.

Angle $EFD = 35^\circ$

Angle $DCB = 75^\circ$

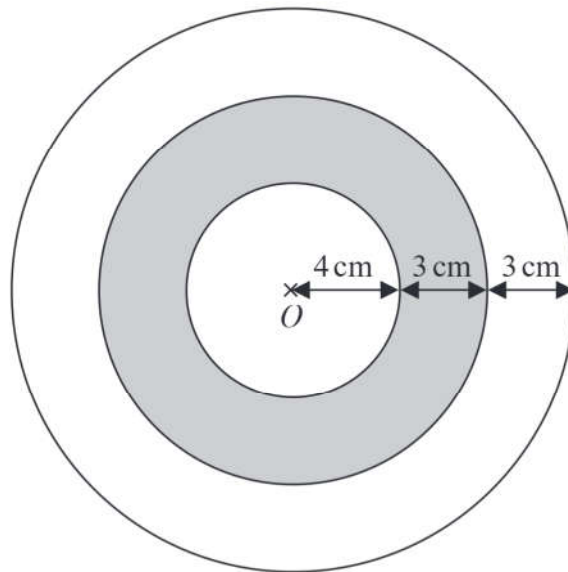
Show that angle $ABF = 70^\circ$

Give a reason for each stage of your working.

(Total for Question 25 is 4 marks)



26 The diagram shows a logo made from three circles.



Each circle has centre O .

Daisy says that exactly $\frac{1}{3}$ of the logo is shaded.

Is Daisy correct?

You must show all your working.

(Total for Question 26 is 4 marks)

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27 The table shows information about the weekly earnings of 20 people who work in a shop.

Weekly earnings (£ x)	Frequency
$150 < x \leq 250$	1
$250 < x \leq 350$	11
$350 < x \leq 450$	5
$450 < x \leq 550$	0
$550 < x \leq 650$	3

(a) Work out an estimate for the mean of the weekly earnings.

£.....
(3)

Nadiya says,

“The mean may **not** be the best average to use to represent this information.”

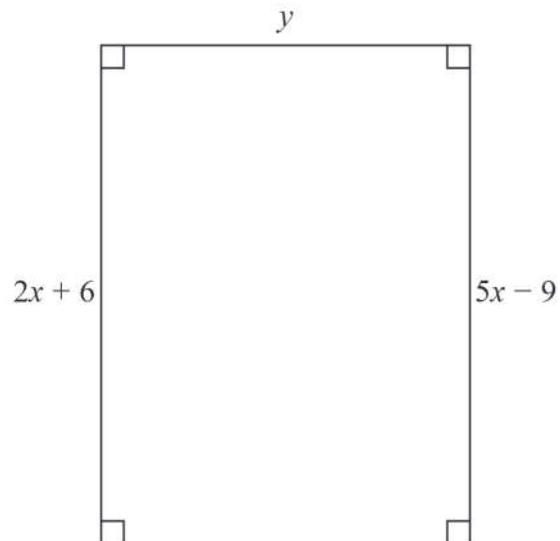
(b) Do you agree with Nadiya?
You must justify your answer.

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

(Total for Question 27 is 4 marks)



28 Here is a rectangle.



All measurements are in centimetres.

The area of the rectangle is 48 cm^2 .

Show that $y = 3$

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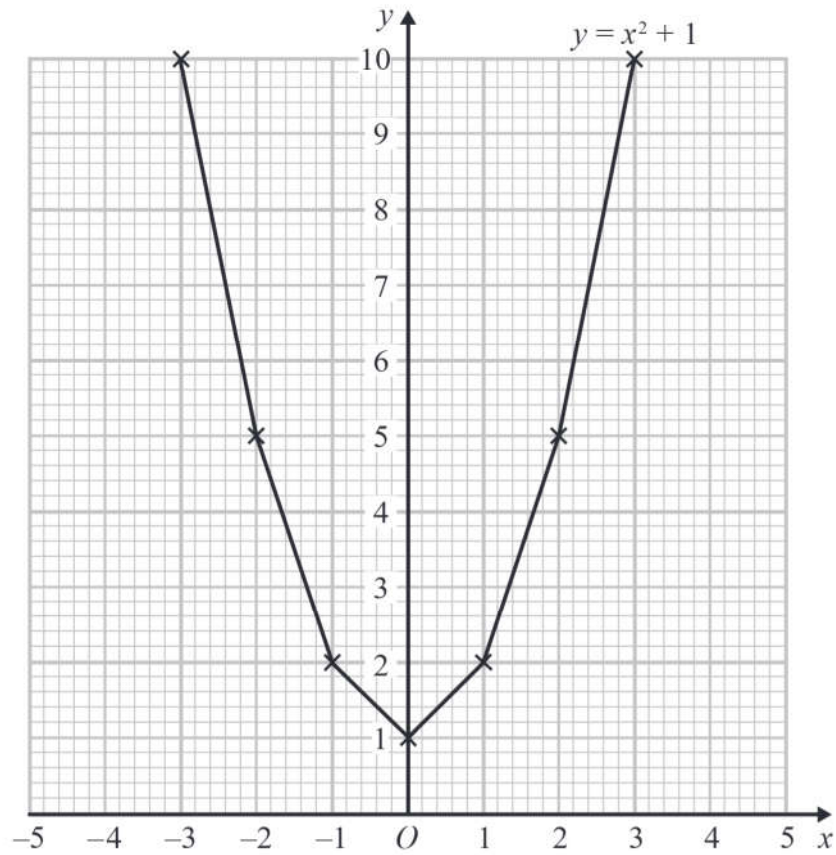
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(Total for Question 28 is 4 marks)



29 Brogan needs to draw the graph of $y = x^2 + 1$

Here is her graph.



Write down one thing that is wrong with Brogan's graph.

.....

.....

(Total for Question 29 is 1 mark)



30 In a sale, the normal price of a book is reduced by 30%.
The sale price of the book is £2.80

Work out the normal price of the book.

£.....

(Total for Question 30 is 2 marks)

TOTAL FOR PAPER IS 80 MARKS

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