

IGCSE Edexcel Past Papers

MATHEMATICS A

Paper 2FR

2015 — Winter 2019

Chapter 1	NUMBER	Page 1
Chapter 2	ALGEBRA	Page 82
Chapter 3	FUNCTIONS & GRAPHS	Page 108
Chapter 4	MENSURATION	Page 117
Chapter 5	GEOMETRY	Page 133
Chapter 6	TRIGONOMETRY	Page 168
Chapter 7	SETS	Page 174
Chapter 8	STATISTICS	Page 179
Chapter 9	PROBABILITY	Page 202
Chapter 10	VECTORS	-----
Chapter 11	MATRICES	-----
Chapter 12	TRANSFORMATION	Page 216
Chapter 13	DIFFERENTIATION & KINEMATICS	-----
	ANSWERS	Page 221

1 - (4MA0-S 2015-Paper 2FR-Q1) - NUMBER

(a) Write down the value of the 3 in the number 4.23

.....
(1)

(b) Write 0.57 as a percentage.

..... %
(1)

(c) Here are five decimal numbers.

3.2	3.082	3.01	3.004	3.10
-----	-------	------	-------	------

(i) Write down the smallest of these numbers.

.....

(ii) Write down the largest of these numbers.

.....
(2)

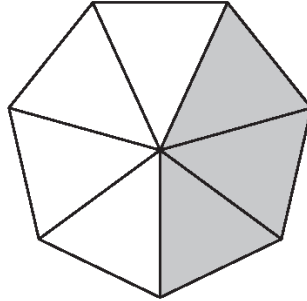
(d) Write 30.845 correct to 1 decimal place.

.....
(1)

(Total for Question is 5 marks)

2 - (4MA0-S 2015-Paper 2FR-Q2) - NUMBER

- (a) The shape is divided into equal triangles.
What fraction of this shape is shaded?



- (b) Work out $\frac{1}{3}$ of 24

.....
(1)

- (c) Write $\frac{4}{5}$ as a decimal.

.....
(1)

- (d) Here are five fractions.

$$\frac{5}{20}$$

$$\frac{9}{36}$$

$$\frac{25}{100}$$

$$\frac{12}{52}$$

$$\frac{17}{68}$$

Find which one of these fractions is **not** equal to $\frac{1}{4}$

.....
(1)

.....
(1)

(Total for Question is 4 marks)

3 - (4MA0-S 2015-Paper 2FR-Q6) - NUMBER

The circles contain terms in a number sequence.



The 5th term and the 8th term are missing.

(a) (i) Write down the 5th term of the sequence.

.....

(ii) Write down the 8th term of the sequence.

.....
(2)

(b) Write down the rule for working out the terms of this sequence.

.....
(1)

The 13th term of the sequence is 3

(c) Work out the 14th term of the sequence.

.....
(1)

A new sequence is made by adding 5 to each term of the first sequence.

(d) Write down the 13th term of this new sequence.

.....
(1)

The sum of the first four terms of the first sequence is 348

(e) Work out the sum of the first four terms of the new sequence.

.....
(1)

(Total for Question is 6 marks)

4 - (4MA0-S 2015-Paper 2FR-Q7) - NUMBER

In Kuran's school, 40% of the pupils are boys.

- (a) Write 40% as a fraction.
Give your fraction in its simplest form.

.....
(2)

- (b) What percentage of the pupils in Kuran's school are girls?

..... %
(1)

In Year 11, there are 70 girls and 42 boys.

- (c) Write down the ratio of the number of girls to the number of boys in Year 11
Give your ratio in the form $1 : n$

.....
(2)

(Total for Question is 5 marks)

5 - (4MA0-S 2015-Paper 2FR-Q8) - NUMBER

Neha writes

$$4 + 9 \times 3 = 13 \times 3 = 39$$

Her teacher says that Neha has made a mistake.

(a) What mistake has Neha made?

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

Neha is given two more calculations to do.

Her teacher says that Neha must show one stage of working and then the answer for each calculation.

(b) Complete the calculations showing one stage of working and the answer.

(i) $24 \div 6 - 3 = \dots\dots\dots = \dots\dots\dots$

(ii) $45 \div (5 + 4) = \dots\dots\dots = \dots\dots\dots$

(2)

(Total for Question is 3 marks)

ANSWERS

www.exam-mate.com

1 - (4MA0-S 2015-Paper 2FR-Q1) - NUMBER

(a)		$\frac{3}{100}$
(b)		57
(c) (i)		3.004
(c) (ii)		3.2
(d)		30.8

2 - (4MA0-S 2015-Paper 2FR-Q2) - NUMBER

(a)		$\frac{3}{7}$
(b)		8
(c)		0.8
(d)		$\frac{12}{52}$

3 - (4MA0-S 2015-Paper 2FR-Q6) - NUMBER

(a) (i)		67
(a) (ii)		43
(b)		subtract 8
(c)		-5
(d)		8
(e)		368

4 - (4MA0-S 2015-Paper 2FR-Q7) - NUMBER

(a)	$\frac{40}{100}$	
		$\frac{2}{5}$
(b)		60
(c)	70 : 42	
		1 : 0.6

5 - (4MA0-S 2015-Paper 2FR-Q8) - NUMBER

(a)		She should have multiplied 9×3 before adding 4
(b) (i)		$4 - 3 = 1$
(b) (ii)		$45 \div 9 = 5$