

Centre Number						Candidate Number				
Surname										
Other Names										
Candidate Signature										

For Examiner's Use	
Examiner's Initials	
Pages	Mark
2–3	
4–5	
6–7	
8–9	
10–11	
TOTAL	

In the style of



General Certificate of Secondary Education
Foundation Tier

Mathematics

43601F

Past Paper Questions by Topic

Number

F

For this paper you must have:

- mathematical instruments.

You must **not** use a calculator.



Time allowed

- 1 hour 15 minutes

Instructions

- Use black ink or black ball-point pen. Draw diagrams in pencil.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- Do all rough work in this book.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is.
- The quality of your written communication is specifically assessed in questions indicated with an asterisk (*)
- You may ask for more answer paper and graph paper. These must be tagged securely to this answer booklet.

Advice

- In all calculations, show clearly how you work out your answer.

1 (a) Work out $7500 + 1500$

Write your answer in words.

.....
.....
.....

Answer

(2 marks)

1 (b) Write 5758 to the nearest hundred.

Answer

(1 mark)

1 (c) What is the value of the digit 3 in the number 423 985?

Answer

(1 mark)

1 (d) Write down the positive square root of 100.

Answer

(1 mark)

1 (e) Which of these is equal to one million?

Circle your answer.

10^3

10^4

10^5

10^6

10^7

(1 mark)



2 The heights of three mountains in England are shown.

Scafell Pike	978 metres
Helvellyn	950 metres
Skiddaw	931 metres

2 (a) Write down the height of Scafell Pike to the nearest 10 metres.

Answer metres

(1 mark)

2 (b) Write down the height of Skiddaw to the nearest 100 metres.

Answer metres

(1 mark)

2 (c) Noah and Will do a sponsored run.

They both run up each of the three mountains. They are each sponsored for 40p per metre of height. They want to raise at least £2000 altogether.

Do they succeed?

.....

.....

.....

.....

.....

.....

(4 marks)



3 Use the numbers from this list to answer the questions.

5 12 13 25 28 30 42 49

3 (a) Write down all the multiples of 4.

Answer (2 marks)

3 (b) Write down all the factors of 100.

Answer (2 marks)

3 (c) Write down a square number.

Answer (1 mark)

3 (d) Write down three numbers that have a sum of 100.

Answer and..... and..... (1 mark)

4 Here are two numbers.

fifty thousand

6500

Which number is bigger?

Give a reason for your answer.

Bigger number

Reason

.....

(2 marks)



5 a, b and c are three positive whole numbers.
 a is one-fifth of c .
 b is one-sixth of c .
 c is less than 100.

What values could c take?

.....
.....
.....
.....

Answer

(5 marks)

6 The numbers 29 and 31 are consecutive prime numbers.
The number halfway between them is 30.
30 is **not** a square number.

Find a pair of consecutive prime numbers less than 30 where the number halfway between them is a square number.

.....
.....
.....

Answerand.....

(2 marks)



7 Work out $8^2 \div 4^3$

.....
.....
.....

Answer (2 marks)

8 You are given that $31.7 \times 24 = 760.8$

8 (a) Write down the value of 317×24

.....

Answer (1 mark)

8 (b) Write down the value of $76.08 \div 24$

.....

Answer (1 mark)

8 (c) Work out the value of 31.7×25

.....
.....
.....

Answer (2 marks)



9 (a) In the final of Britain's Got Talent there are 2 singers and 1 magician.

What fraction are singers?

Answer (1 mark)

9 (b) The number of votes that the winner receives is 2827 273.

Write this number to the nearest million.

Answer (1 mark)

9 (c) One in every five households watched the final on TV.

What percentage of households watched the final?

.....
.....

Answer % (2 marks)



10 (a) A century means 100 years

10 (a) (i) How many years is half a century?

.....

Answer (1 mark)

10 (a) (ii) A house is 63 years old.

How many more years will it be before becomes a century old?

.....

Answer (1 mark)

10 (b) A race is run over a distance of fifteen hundred metres. Write this distance in figures.

Answer metres (1 mark)

10 (c) Write down the square root of 64.

.....

Answer (1 mark)

10 (d) Two numbers have a difference of 40.
Each number is a factor of 100.

Work out the two numbers

.....

.....

Answer and (2 marks)



***11(a) (i)** Simplify the expression $n \times 5$

Answer (1 mark)

11 (a) (ii) Simplify fully $2x + 5y + 3x - 2y$

Answer (2 marks)

11 (b) m represents an even number.

Explain why $(m + 1)(m - 1)$ is always odd.

.....
.....
.....

(2 marks)

12 (a) Circle **all** the prime numbers in this list.

3 6 7 9 10 13 15

(2 marks)

12 (b) x is a positive whole number. $6x - 1$ is not a prime number.
Work out a possible value for x .

.....
.....
.....
.....

Answer (2 marks)



13 (a) (i) Write down a multiple of 6 that is greater than 20.

Answer (1 mark)

13 (a) (ii) Write down a factor of 20 that is less than 6.

Answer (1 mark)

13 (b) Use these mathematical terms to complete the statements below.

cube cube root square square root

10 is the of 100

144 is the of 12

5 is the of 125

(3 marks)

13 (c) This is Hassan's working for the calculation $12 + 4 \times 10$

$$12 + 4 = 16$$

$$16 \times 10 = 160$$

$$\text{Answer} = 160$$

Hassan is wrong.

Work out the correct answer for the calculation.

.....

.....

Answer (1 mark)

