Write your name here

Surname	Other Names

Mathematics

June 2018 Paper 2 (Calculator Allowed)
Part 1 (First half of the paper)
Edexcel Foundation Tier

Time: 45 minutes

Q	Topic	Max Mark	My Marks
1	Fractions, Decimals and Percentages	1	
2	Rounding	1	
3	Powers and Roots	1	
4	Place Value	1	
5	Metric Conversions	3	
6	Factors and Multiples	3	
7	Systematic Listing	2	
8	Factors, Money Problems	5	
9	Compound Measures, Speed	4	
10	Prime Numbers	3	
11	Solving Equations	3	
12	Pie Charts	3	
13	Writing Probability	2	
14	Frequency Trees	3	
15	Angles in a Triangle, Angles in Parallel Lines	2	
16	Using Frequency Tables	3	
	Total	40	

Answer ALL questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

1 Write $\dfrac{4}{50}$ as a percentage.

....%

(Total for Question 1 is 1 mark)

2 Write 1.59 correct to 1 decimal place.

....

(Total for Question 2 is 1 mark)

3 Work out the value of 3^5

....

(Total for Question 3 is 1 mark)

4 Write down a 6 digit number that has 4 as its thousands digit.
You can only use the digit 4 once.

....

(Total for Question 4 is 1 mark)

5 (a) Change 35 cm to mm.

.... mm
(1)

(b) Change 7700 millilitres to litres.

.... litres
(1)

(c) Change 0.32 kilograms to grams.

.... grams
(1)

(Total for Question 5 is 3 marks)

6 Margaret is thinking of a number.
She says,

"My number is odd. It is a factor of 36 and a multiple of 3"

There are two possible numbers Margaret can be thinking of.

Write down these two numbers.

....

(Total for Question 6 is 3 marks)

7   Mohsin, Yusuf and Luke are going to play a game.
    At the end of the game, one of them will be in First place, one of them will be in
    Second place and one of them will be in Third place.

    Use the table below to list all the possible outcomes of the game.

First place	Second place	Third place

(Total for Question 7 is 2 marks)

8 Neil buys 30 pens, 30 pencils, 30 rulers and 30 pencil cases.

Price list	
pens	6 for 82p
pencils	15 for 45p
rulers	10 for £1.25
pencil cases	37p each

What is the total amount of money Neil spends?

£.................................

(Total for Question 8 is 5 marks)

9 Emily drives 186 miles in 3 hours.

(a) What is her average speed?

.... mph

Sarah drives at an average speed of 58 mph for 4 hours.

(b) How many miles does Sarah drive?

.... miles

(2)

(Total for Question 9 is 4 marks)

10 (a) Write down all the prime numbers between 20 and 30

....

(2)

Catherine says,

"2 is the only even prime number."

(b) Is Catherine right?
You must give a reason for your answer.

....

....

(1)

(Total for Question 10 is 3 marks)

11 (a) Solve $x + x + x = 51$

$x = $ ....
(1)

(b) Solve $\dfrac{y}{4} = 3$

$y = $ ....
(1)

(c) Solve $2f + 7 = 18$

$f = $ ....
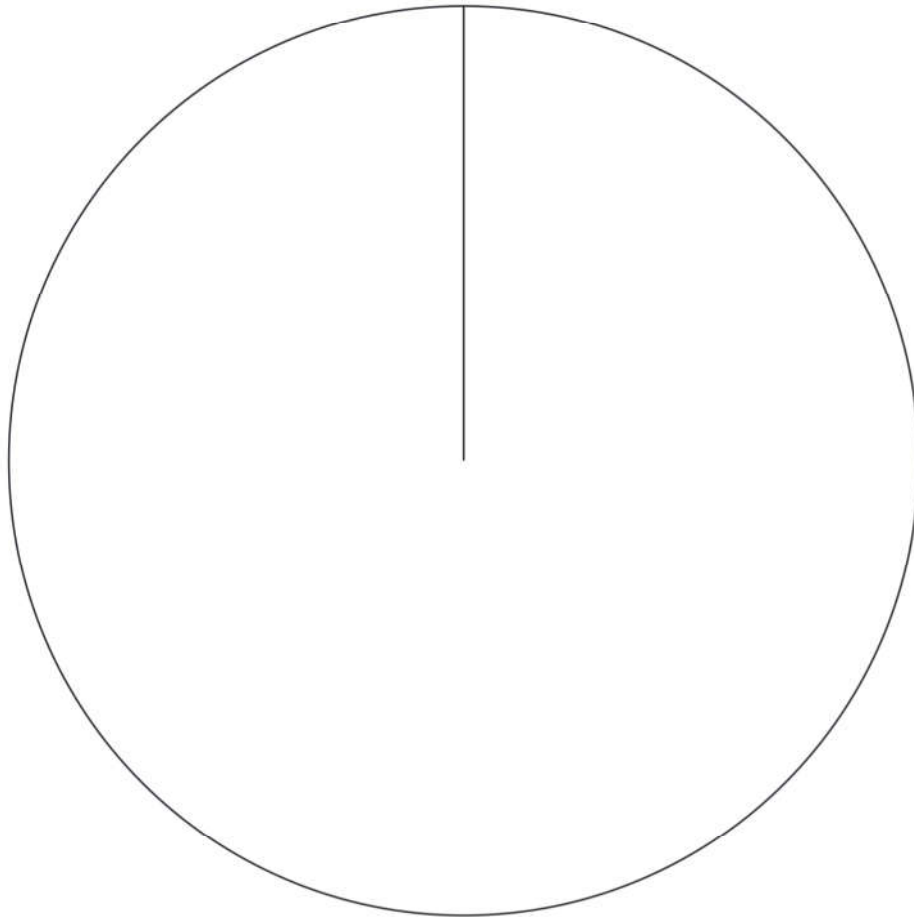(1)

(Total for Question 11 is 3 marks)

12 A group of football fans were asked what their half time snack was.

The table below gives information about their answers.

Snack	Number of fans
burger	11
pie	17
hot dog	8

Draw an accurate pie chart for this information.

(Total for Question 12 is 3 marks)

13 A scout group has a raffle to raise money for charity.
There is 1 prize to be won in the raffle.

Laura buys 12 raffle tickets.
A total of 350 raffle tickets are sold.

Find the probability that Laura does **not** win the prize.

....
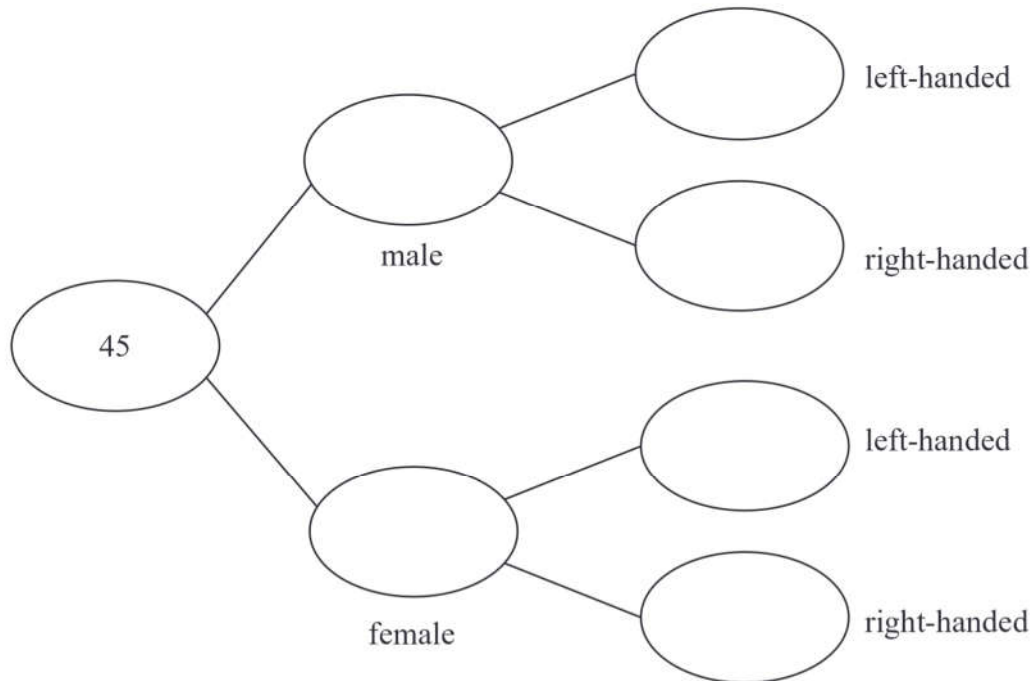
(Total for Question 13 is 2 marks)

14 Each worker in a factory is either left-handed or right-handed.

22 of the 45 workers are male.
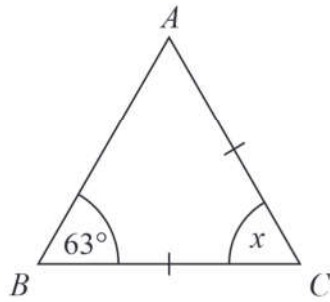16 of the 34 right-handed workers are female.

Complete the frequency tree for this information.

(Total for Question 14 is 3 marks)

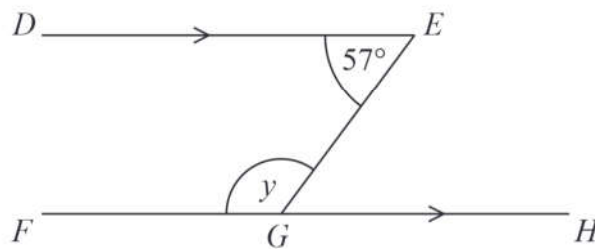**15** Mary needs to work out the size of angle x in this diagram.

She writes

$x = 63°$ because base angles of an isosceles triangle are equal.

Mary is wrong.

(a) Explain why.

....

....

(1)

William needs to work out the size of angle y in this diagram.

William writes

Working	Reason
angle $EGH = 57°$	because corresponding angles are equal
$y = 180° - 57°$ $y = 123°$	because angles on a straight line add up to $180°$

One of William's reasons is wrong.

(b) Write down the correct reason.

....

....

(1)

(Total for Question 15 is 2 marks)

Turn over ▶

16 Marla buys some bags of buttons.

There are 19 buttons or 20 buttons or 21 buttons or 22 buttons in each bag.

The table gives some information about the number of buttons in each bag.

Number of buttons	Frequency
19	....
20	7
21	3
22	1

The total number of buttons is 320

Complete the table.

(Total for Question 16 is 3 marks)