

Write your name here

Surname

Other Names

Mathematics

June 2017 Paper 2 (Calculator Allowed)

Part 1 (First half of the paper)

Edexcel Foundation Tier

Time: 45 minutes

Q	Topic	Max Mark	My Marks
1	Simplifying Algebra	4	
2	Rounding	1	
3	Bar Charts	5	
4	Ordering Fractions, Equivalent Fractions	2	
5	Tally Charts, Pictograms	2	
6	Fraction of Amount, Money Problems	4	
7	Writing Probability	1	
8	Powers, Factors, Multiples and Primes	3	
9	Angles, Forming and Solving Equations	3	
10	Proportion, Best Buy	4	
11	Real Life Graphs, Conversion Graphs	4	
12	Use of Calculator	2	
13	Transformations, Rotation, Reflection	4	
	Total	39	

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 (a) Simplify $5p - 3p + p$

.....
(1)

(b) Simplify $m^3 + m^3$

.....
(1)

(c) Simplify $10 + 3c + 5d - 7c + d$

.....
(2)

(Total for Question 1 is 4 marks)

2 Write 56.78 correct to one significant figure.

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

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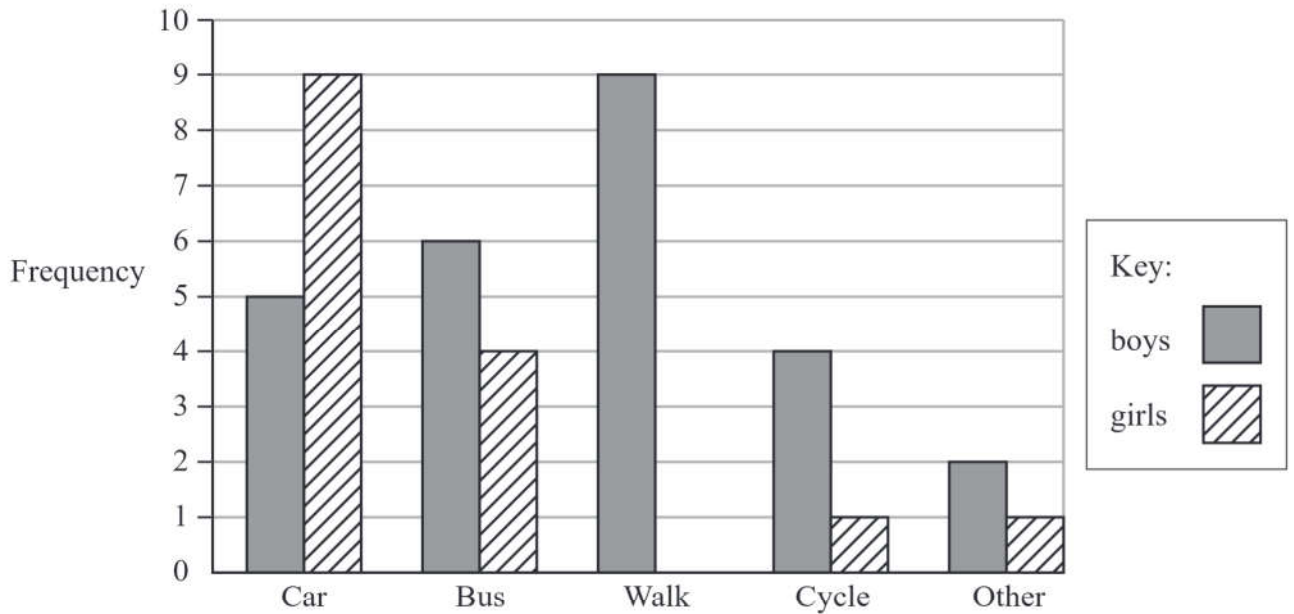


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3 A teacher asks the students in Year 6 what type of transport they use to get to school. The dual bar chart shows some of the results.



(a) What is the most popular type of transport used by the boys?

.....
(1)

7 girls walk to school.

(b) Show this information on the dual bar chart.

(1)

More of the students get to school by car than by bus.

(c) How many more?

.....
(1)

The number of students in Year 5 is the same as the number of students in Year 6

(d) What is the total number of students in Years 5 and 6?

.....
(2)

(Total for Question 3 is 5 marks)



4 Here are four fractions.

$$\frac{2}{5}$$

$$\frac{11}{30}$$

$$\frac{1}{2}$$

$$\frac{7}{15}$$

Write these fractions in order of size.
Start with the smallest fraction.

(Total for Question 4 is 2 marks)

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5 David sells CDs in a shop.

The tally chart shows information about the number of CDs David sold on Monday, on Tuesday and on Wednesday.

	Tally	Frequency
Monday	 	12
Tuesday	 	18
Wednesday	 	8

(a) Write down **one** thing that is wrong with the tally chart.

.....

.....

(1)

David drew this pictogram to show the information for Tuesday and Wednesday.

Tuesday	○ ○ ○ ○ ○
Wednesday	○ ○ ◐

Key: ○ represents 3 CDs

(b) Write down **one** thing that is wrong with this pictogram.

.....

.....

(1)

(Total for Question 5 is 2 marks)



6 There are 495 coins in a bottle.

$\frac{1}{3}$ of the coins are £1 coins.

124 of the coins are 50p coins.

The rest of the coins are 20p coins.

Work out the total value of the 495 coins.

£.....

(Total for Question 6 is 4 marks)



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7 The probability that a new fridge has a fault is 0.015

What is the probability that a new fridge does **not** have a fault?

.....

(Total for Question 7 is 1 mark)

8 Here is a list of numbers.

21 22 23 24 25 26 27 28 29

(a) From the numbers in the list, write down a square number.

.....

(1)

(b) From the numbers in the list, write down a number that is a multiple of **both** 4 and 6

.....

(1)

(c) Write down all the prime numbers in the list.

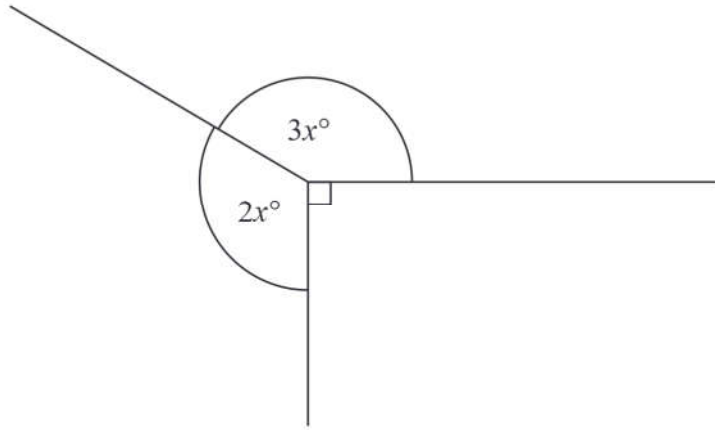
.....

(1)

(Total for Question 8 is 3 marks)



9



Find the value of x .

(Total for Question 9 is 3 marks)



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10 Suha is going to buy 150 envelopes.

Here is some information about the cost of envelopes in two shops.

Letters2send
Pack of 25 envelopes for £3.49

Stationery World
Pack of 10 envelopes for £2.10
Buy 2 packs get 1 pack free

Suha wants to buy the envelopes as cheaply as possible.

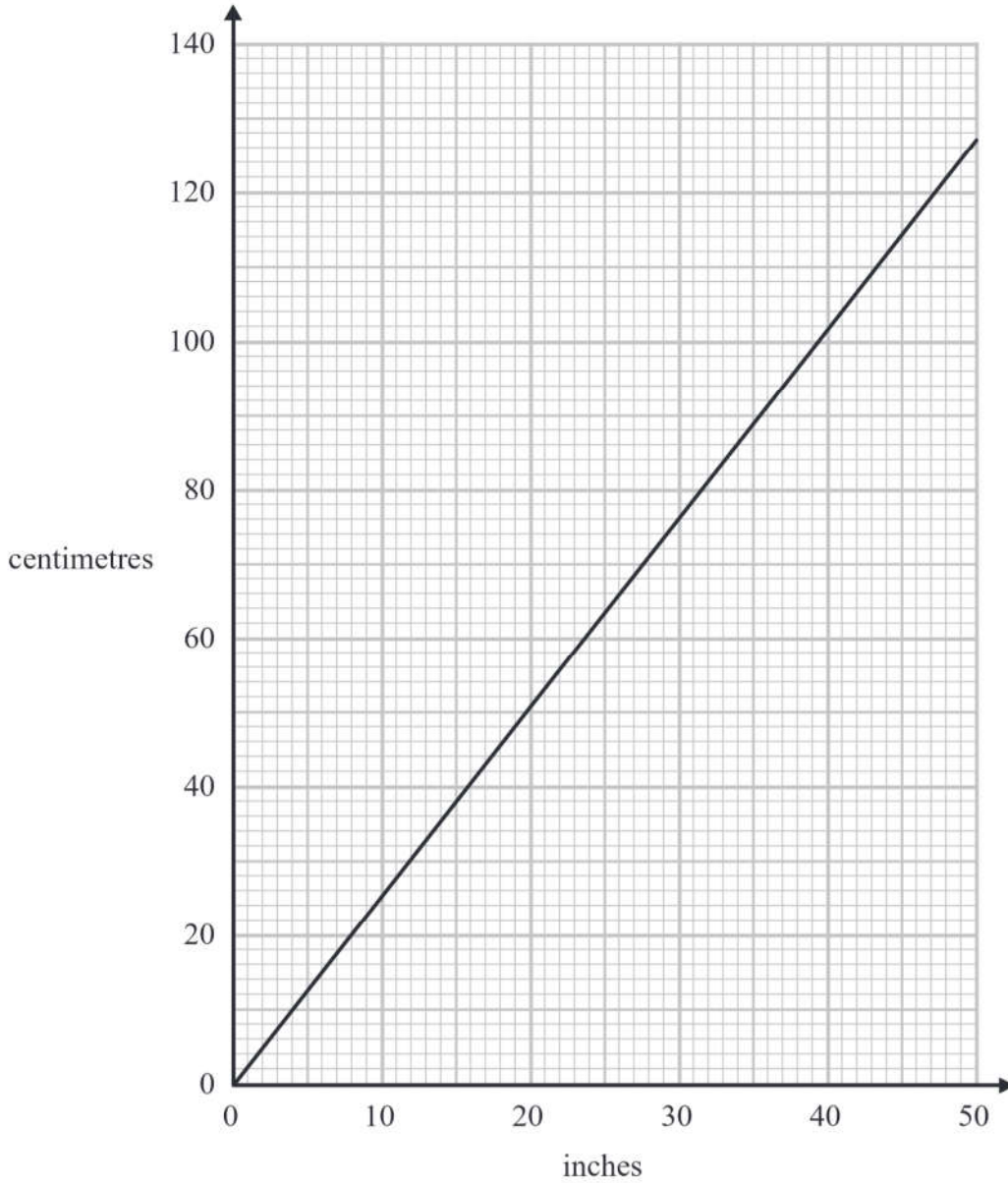
Which shop should Suha buy the 150 envelopes from?

You must show how you get your answer.

(Total for Question 10 is 4 marks)



11 You can use this graph to change between inches and centimetres.



(a) Change 74 cm to inches.

..... inches
(1)



Daniel's height is 6 feet 3 inches.

1 foot = 12 inches

(b) What is Daniel's height in centimetres?

..... centimetres
(3)

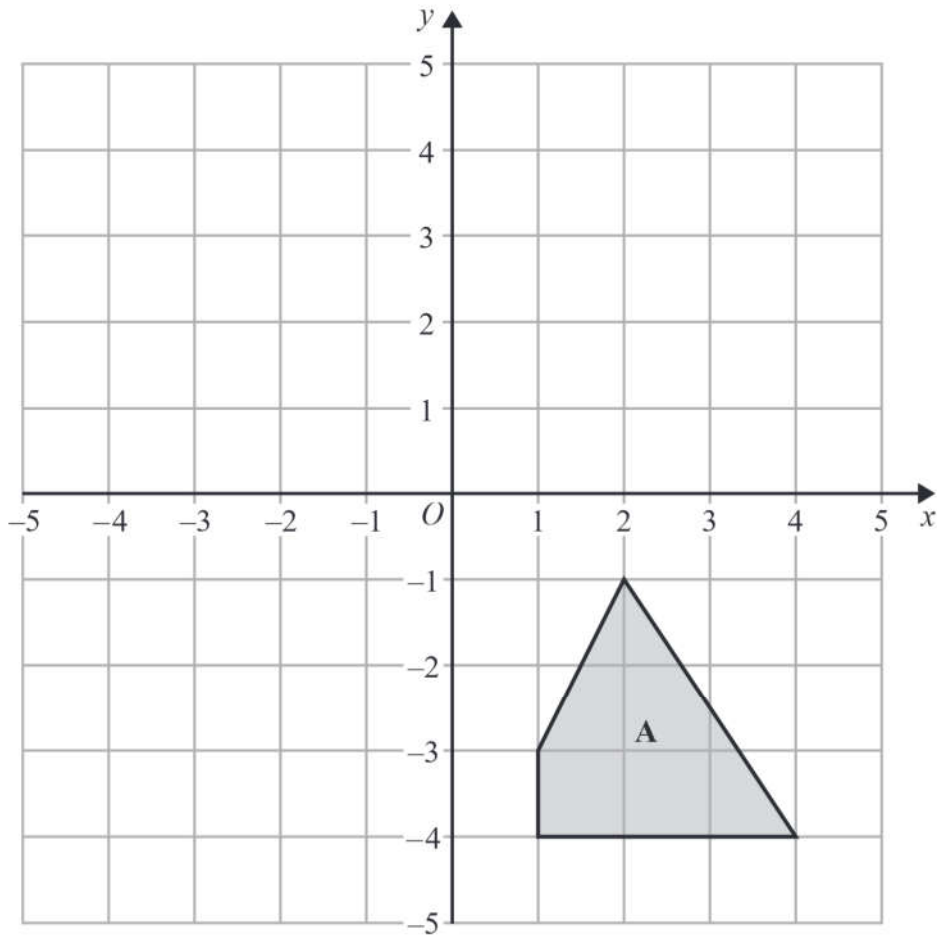
(Total for Question 11 is 4 marks)

12 Find the value of $\frac{\sqrt{13.4 - 1.5}}{(6.8 + 0.06)^2}$

Write down all the figures on your calculator display.

.....
(Total for Question 12 is 2 marks)

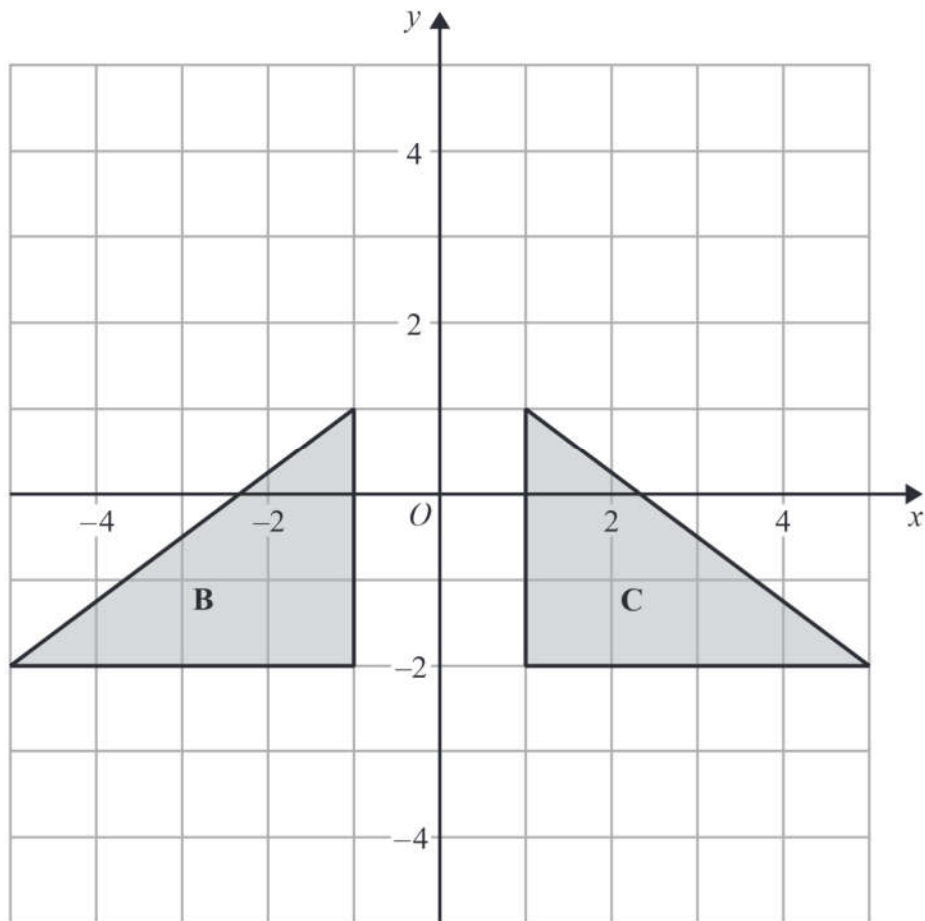




(a) Rotate shape A 90° clockwise about centre O.

(2)





(b) Describe fully the single transformation that maps triangle **B** onto triangle **C**.

(2)

(Total for Question 13 is 4 marks)

