Quick paper C3

Paper 2 style · Calculator · Foundation

18 marks
about 15–20 minutes

Name	Date	Score / 18

Answer ALL questions. Write your answers in the spaces provided. You must write down all the stages in your working. You may use a calculator. Diagrams are **NOT** accurately drawn unless it says so.

Help on the longer questions

Underlined words tell you what the question wants.

Remember reminds you of a fact you need.

1 **Write** $\frac{9}{100}$ as a decimal.

.....

(1)

(Total for Question 1 is 1 mark)

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2 **Write down** a multiple of 7 that is between 50 and 60

.....

(1)

(Total for Question 2 is 1 mark)

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3 **Remember** Collect like terms: the same letter (and power) together. Watch the sign in front of each term.

(a) **Simplify** $4a \times 6b$

.....

(1)

(b) **Simplify** $k \times k$

.....

(1)

(c) **Simplify** $\frac{3m + 9n}{3}$

.....

(1)

(Total for Question 3 is 3 marks)

Turn over ►

4 Ben buys some fruit.
He buys

3 apples	weighing 140 g each
2 pears	weighing 180 g each
5 plums	weighing 60 g each

and some kiwis.
Each kiwi has a weight of 80 g.
The fruit has a total weight of 1.32 kg.

Remember 1 kg = 1000 g. 1 litre = 1000 ml. 1 m = 100 cm. 1 cm = 10 mm. 1 km = 1000 m.

(a) **Work out** how many kiwis Ben buys.

.....

(3)

(b) Sam wants to buy 12 potatoes.
She asks for 2 kg of potatoes at a shop.
Sam assumes that each potato has a weight of 150 g.
If Sam's assumption is correct, will she get 12 potatoes?
You must show how you get your answer.

(2)

(c) If Sam's assumption is **not** correct, could she get 12 potatoes?
Justify your answer.

(1)

(Total for Question 4 is 6 marks)

5 Asha and Ben share some money in the ratio 5 : 2

(a) What fraction of the money does Ben get?

.....

(1)

(b) Cat and Dan share some sweets.

Cat gets $\frac{1}{3}$ of the sweets.

Write down the ratio of the number of sweets Dan gets to the number of sweets Cat gets.

.....

(1)

(Total for Question 5 is 2 marks)

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6 Zoe says,

"There are more prime numbers between 30 and 40 than there are between 40 and 50"

Is Zoe right?

You must show how you get your answer.

(2)

(Total for Question 6 is 2 marks)

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7 The table shows a tennis club's income last year from a fete, a quiz and membership fees.

	Income	
Fete	£300	
Quiz	Entry fees	20 at £4 each
	Refreshments	£40
Membership fees	30 at £10 each	

Express as a ratio

the income from the fete : the income from the quiz : the income from membership fees

Give your ratio **in its simplest form**.

> **Remember** Add the ratio parts to find the total number of parts. One part = amount ÷ total parts. Then multiply.

.....

(3)

(Total for Question 7 is 3 marks)

TOTAL FOR PAPER IS 18 MARKS

C3 mark scheme

Q		Answer	Mark	Notes
1		0.09	B1	
2		56	B1	
3	(a)	$24ab$	B1	
	(b)	k^2	B1	
	(c)	$m + 3n$	B1	
4	(a)	3	M1 M1 A1	M1 for $3 \times 140 + 2 \times 180 + 5 \times 60$ (= 1080) M1 for $(1320 - 1080) \div 80$ A1 cao
	(b)	Yes: $2000 \div 150 = 13.3...$, so she gets 13 potatoes	M1 C1	M1 for $2000 \div 150$ or 12×150 (= 1800) C1 Yes with correct figures
	(c)	Yes, if the potatoes weigh less than about 167 g each; if they are heavier she would get fewer than 12	C1	C1
5	(a)	$\frac{2}{7}$	B1	
	(b)	2 : 1	B1	
6		No: 31 and 37 (2 primes) compared with 41, 43 and 47 (3 primes)	M1 C1	M1 for listing the primes in one range C1 No with both lists correct
7		5 : 2 : 5	M1 M1 A1	M1 for $20 \times 4 + 40$ (= 120) or 30×10 (= 300) M1 for 300 : 120 : 300 A1 cao

B1 = mark for a correct answer · **M1** = method mark · **A1** = accurate answer after M1 · **C1** = reason · **cao** = correct answer only

Score ____ / 18

Write your score on the front page