NON-CALC A

GCSE Mathematics · Foundation Tier

40 marks · 45 minutes · Non-calculator

Name ..... **Class** .....

Answer all questions. Show all your working. Diagrams are NOT accurately drawn unless stated.

1 Write 0.35 as a percentage.

..... %

(Total for Question 1 is 1 mark)

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2 Here is a list of numbers.

2 9 15 17 21 24 27

From the list, write down

(a) a prime number greater than 10

.....

(1)

(b) a number that is a multiple of both 3 and 8

.....

(1)

(Total for Question 2 is 2 marks)

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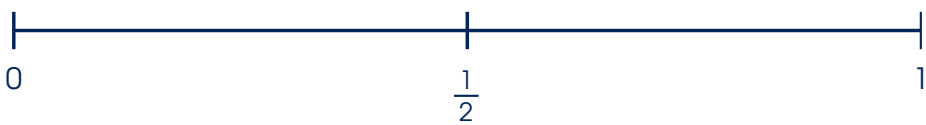
3 A bag contains 3 green counters, 5 yellow counters and 2 white counters.
Lena takes a counter at random from the bag.

(a) Write down the probability that the counter is yellow.

.....

(1)

(b) On the probability scale, mark with a cross (×) the probability that the counter is green.



(1)

(Total for Question 3 is 2 marks)

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4 Work out 386 × 24

.....

(Total for Question 4 is 2 marks)

5 **(a)** Simplify $5m + 3n - 2m + n$

.....

(2)

(b) Work out the value of $3a - b^2$ when $a = 6$ and $b = -2$

.....

(2)

(Total for Question 5 is 4 marks)

6 At a cinema, an adult ticket costs £8.50 and a child ticket costs £5.75

Mr Khan buys 2 adult tickets and 3 child tickets.

He also wants to buy a large popcorn for £6

Mr Khan has £40

Does Mr Khan have enough money to buy the tickets and the popcorn?

You must show all your working.

(Total for Question 6 is 3 marks)

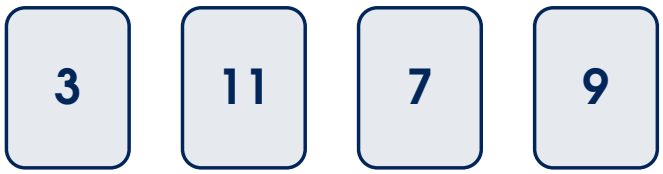
7 Amir and Beth share £56 in the ratio 3 : 5

How much more money does Beth get than Amir?

£.....

(Total for Question 7 is 3 marks)

8 Kai has five number cards. Four of the cards are shown below.



The mean of the numbers on all five cards is 8

(a) Work out the number on the fifth card.

.....

(2)

Kai adds a sixth card. The mean of the numbers on all six cards is still 8

(b) Write down the number on the sixth card.

.....

(1)

(Total for Question 8 is 3 marks)

9

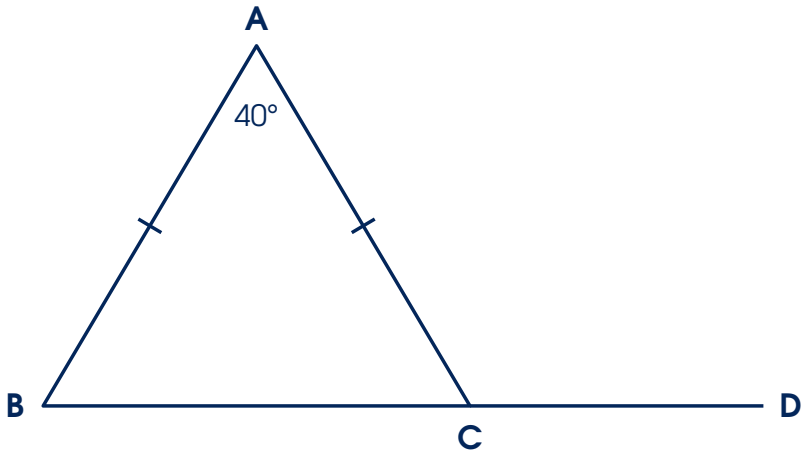


Diagram NOT accurately drawn

ABC is an isosceles triangle with *AB* = *AC*. *BCD* is a straight line.

Work out the size of angle *ACD*.

Give a reason for each stage of your working.

..... °

(Total for Question 9 is 3 marks)

10 Solve $5x + 9 = 2x - 6$

$x =$ .....

(Total for Question 10 is 2 marks)

11 Work out $2\frac{1}{3} + 1\frac{3}{4}$

Give your answer as a mixed number.

.....

(Total for Question 11 is 2 marks)

12 The same jacket is sold in two shops.

Shop A	**Shop B**
Jacket £72	Jacket £60
Sale: $\frac{1}{4}$ off	Sale: 15% off

In which shop is the jacket cheaper?

You must show all your working.

(Total for Question 12 is 3 marks)

13 Here are the first four terms of an arithmetic sequence.

5 9 13 17

(a) Find an expression, in terms of n, for the nth term of the sequence.

.....

(2)

Shona says, "102 is a term in this sequence."

(b) Is Shona correct? You must give a reason for your answer.

.....

.....

(1)

(Total for Question 13 is 3 marks)

14 The diagram shows a rectangular garden. There is a square pond in the garden.

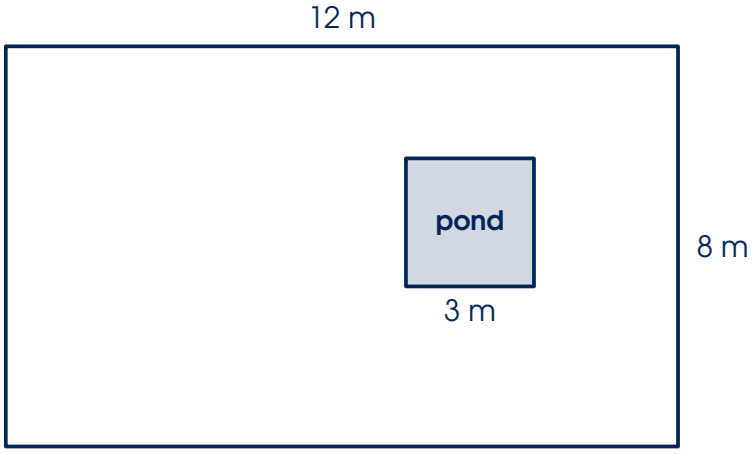


Diagram NOT accurately drawn

Jo is going to cover the garden, but not the pond, with grass seed.

One box of grass seed covers 20 m². Each box costs £4.99

Work out the total cost of the boxes Jo needs to buy.

£.....

(Total for Question 14 is 4 marks)

15 In a running club, the ratio of boys to girls is 4 : 5

There are 12 more girls than boys in the club.

How many members are in the running club altogether?

.....

(Total for Question 15 is 3 marks)

TOTAL FOR PAPER IS 40 MARKS