CALC G

GCSE Mathematics · Foundation Tier

40 marks · 45 minutes · Calculator

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

Answer all questions. Show all your working. Calculators may be used. Diagrams are NOT accurately drawn.

1 Write $\frac{7}{8}$ as a decimal.

.....

(Total for Question 1 is 1 mark)

2 Work out $\frac{5.6 + 3.82}{1.4^2}$

Give your answer correct to 1 decimal place.

.....

(Total for Question 2 is 2 marks)

3 Expand and simplify $4(2x - 3) - 5x$

.....

(Total for Question 3 is 2 marks)

4 Work out $2.5^3 - \sqrt{40.96}$

Write down all the figures on your calculator display.

.....

(Total for Question 4 is 2 marks)

5 A watch costs £86 in the UK. The same watch costs €98 in Spain.

The exchange rate is £1 = €1.16

In which country is the watch cheaper, and by how much in pounds?

..... by £.....

(Total for Question 5 is 3 marks)

6 Bus A leaves the bus station every 12 minutes. Bus B leaves every 18 minutes.

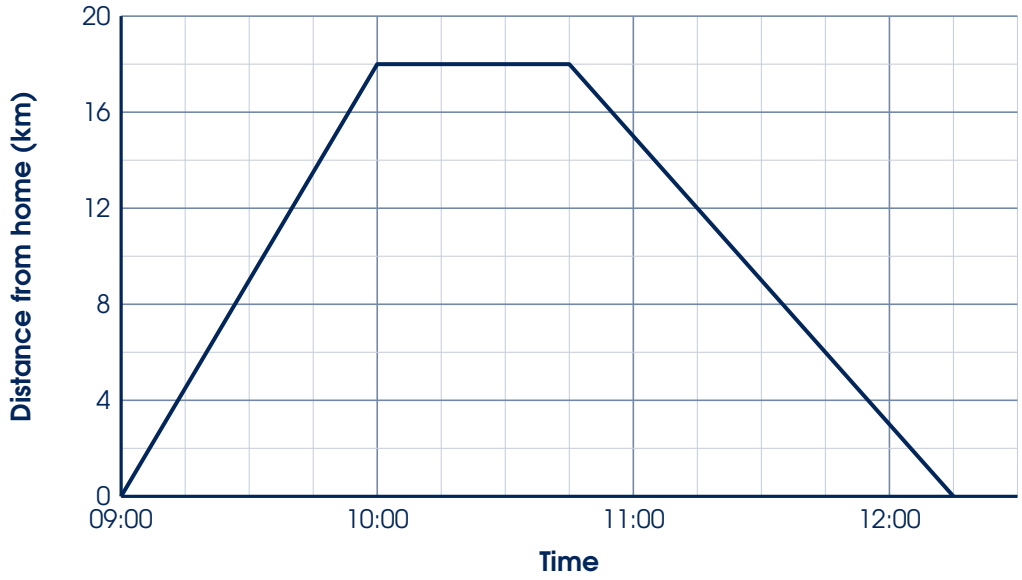
Both buses leave the bus station at 09:00

When is the next time both buses leave the station at the same time?

.....

(Total for Question 6 is 2 marks)

7 Ravi cycled from his home to a lake. He stopped at the lake, then cycled home. The travel graph shows his journey.



(a) How far from home was Ravi at 09:30?

..... km

(1)

(b) For how many minutes did Ravi stop at the lake?

..... minutes

(1)

(c) Work out Ravi's average speed on his journey home.

..... km/h

(2)

(Total for Question 7 is 4 marks)

8

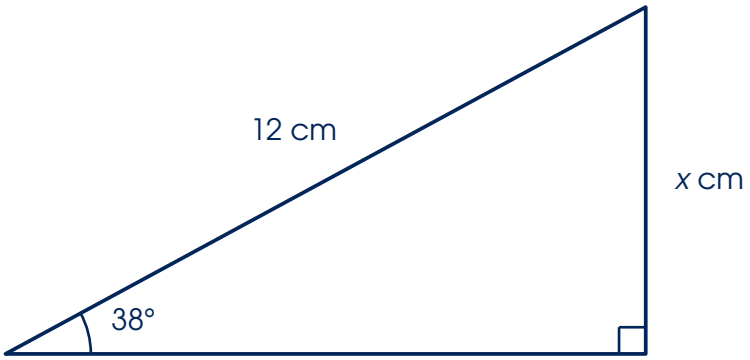


Diagram NOT accurately drawn

Work out the value of x. Give your answer correct to 2 decimal places.

$x =$ .....

(Total for Question 8 is 2 marks)

9 In a sale, all prices are reduced by 20%. The sale price of a coat is £58.40

Lily says, "The price before the sale was 58.40 + 20% of 58.40, which is £70.08"

(a) Explain what Lily has done wrong.

.....

.....

(1)

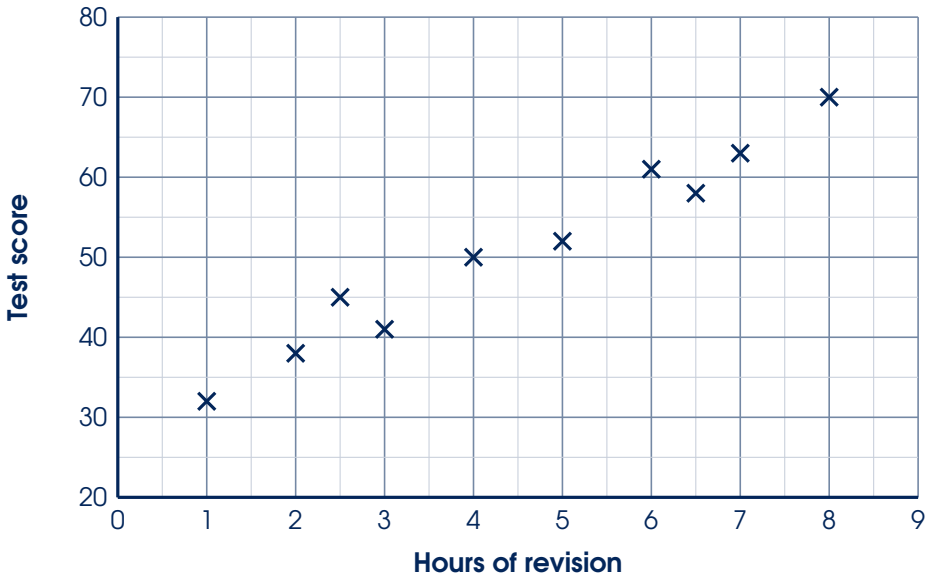
(b) Work out the price of the coat before the sale.

£.....

(2)

(Total for Question 9 is 3 marks)

10 The scatter graph shows the number of hours 10 students spent revising and their test scores.



(a) Describe the correlation shown on the scatter graph.

.....

(1)

Another student spent 5.5 hours revising.

(b) Use the scatter graph to estimate this student's test score.

.....

(2)

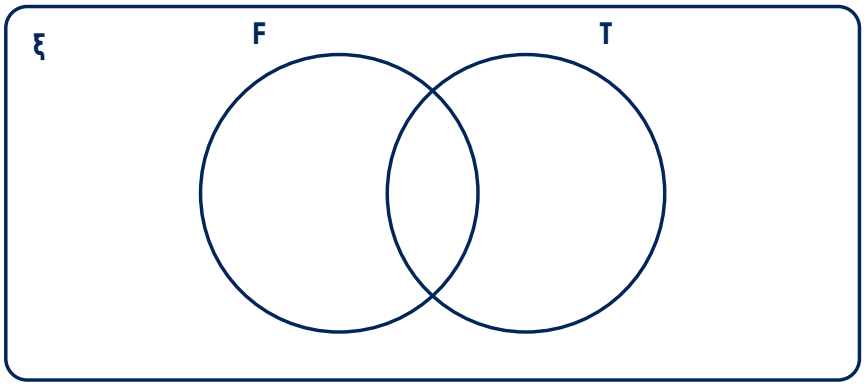
(Total for Question 10 is 3 marks)

11 There are 40 students in a club.

23 of the students play football (F). 15 of the students play tennis (T).

6 of the students play both football and tennis.

(a) Complete the Venn diagram.



(2)

A student is chosen at random from the club.

(b) Find the probability that the student plays neither football nor tennis.

.....

(1)

(Total for Question 11 is 3 marks)

12 In a sequence, each term after the second is found by adding the two terms before it.

The first term is 3 and the fourth term is 19

Work out the second and third terms of the sequence.

3 , ... , ... , 19

(Total for Question 12 is 3 marks)

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13 A jug is in the shape of a cylinder. The radius is 4 cm and the height is 15 cm.

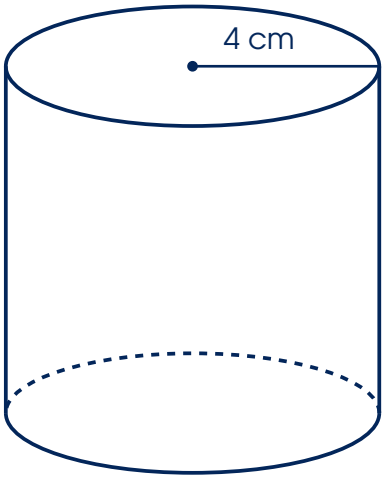


Diagram NOT accurately drawn

(a) Work out the volume of the jug. Give your answer correct to the nearest cm^3.

..... cm^3

(2)

The jug is full of water. Cups that each hold 180 cm^3 are filled from the jug.

(b) How many cups can be filled completely?

.....

(1)

(Total for Question 13 is 3 marks)

14 It takes 6 decorators 15 days to paint a school.

(a) How many days would it take 9 decorators to paint the same school?

..... days

(2)

(b) Write down one assumption you made in your answer to part (a).

.....

(1)

(Total for Question 14 is 3 marks)

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15 A rectangular patio measures 6.4 m by 3.5 m.

Lee is going to cover the patio with square tiles. Each tile has sides of length 40 cm.

The tiles are sold in packs of 12. Each pack costs £18.75

Work out the cost of the tiles Lee needs to buy.

£.....

(Total for Question 15 is 4 marks)

TOTAL FOR PAPER IS 40 MARKS