



Class
Maths

Video Solutions



PRACTICE PAPER FOR

AQA Paper 3H
(June 2026)

----- Disclaimer -----

This paper has been created based on some of the common paper 3 topics from previous years and also careful analysis of what topics have already appeared in paper 1/2. The paper should be excellent at helping students revise for exams, however it should not be relied upon as the basis for revision. The topics from this paper may well appear in the real exams, however there is absolutely no guarantee of this. Some topics may appear, some may not. Despite what you might see on social media it is not possible to “predict” the paper. This is usually what people say when they are selling you something...

The best way to prepare for the exams is to **revise all topics**.

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Are you taking A-level maths next year?

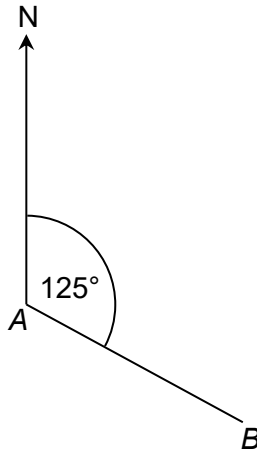
Scan the QR code for more information on the
fx-CG100, the ultimate calculator for A Level Maths.





Do not write outside the box

4



Not drawn accurately

Work out the bearing of A from B.

[2 marks]

Answer _____ °

5

$$\mathbf{a} = \begin{pmatrix} 1 \\ -4 \end{pmatrix} \quad \mathbf{b} = \begin{pmatrix} -5 \\ 3 \end{pmatrix}$$

Work out the vector $\mathbf{a} - 2\mathbf{b}$

[2 marks]

Answer $\begin{pmatrix} \\ \end{pmatrix}$

$\frac{}{8}$

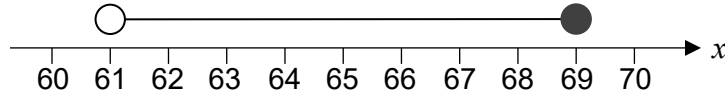
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Do not write
outside the
box

6 The number line below shows an inequality for an integer x



6 (a) Write down the smallest possible value for x . [1 mark]

Answer _____

6 (b) Write down a value for x that is a cube number. [1 mark]

Answer _____

6 (c) Write down a value for x that is a prime number. [1 mark]

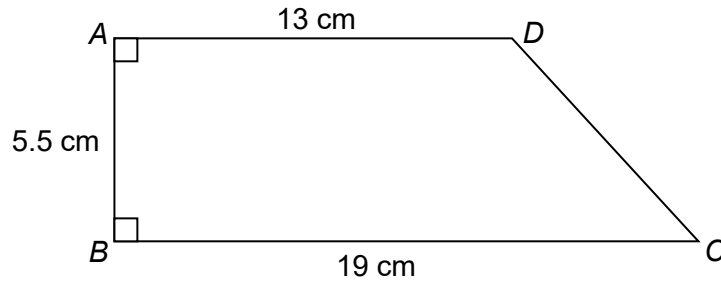
Answer _____





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7 Quadrilateral $ABCD$ is the cross-section of a prism.



The prism has a length of 2.5 metres.

Work out the volume of the prism in cm^3

[4 marks]

Answer _____ cm^3

7

Turn over ►





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8 An episode of a TV show called “Price Busters” challenged viewers to record the prices of packets of crisps at their local shops.

The table below shows information about the prices, in pence, of 100 packets of crisps sent in by the viewers.

Price, (x pence)	Frequency		
$50 < x \leq 70$	9		
$70 < x \leq 90$	19		
$90 < x \leq 110$	45		
$110 < x \leq 130$	27		

8 (a) Work out an estimate for the mean price of a packet crisps. [3 marks]

Answer _____ pence

8 (b) Trevor says

“The greatest possible range of the prices of the packets of crisps is 80 pence”

Is Trevor correct? Tick **one** box and give a reason for your answer. [1 mark]

Yes

No

Reason _____





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8 In a different episode of "Price Busters", viewers recorded the prices of drinks.
The lowest prices found for a can and a bottle of drink are shown below.



Can of drink
Capacity 330 ml
Price 35 pence

Bottle of drink
Capacity 2 litres
Price £1.95

8 (c) Which drink is better value for money?

Tick **one** box and show working to support your answer.

Can of drink

Bottle of drink

[3 marks]

7

Turn over ►





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9 The n^{th} term of sequence **A** is $80 - 3n$

The n^{th} term of sequence **B** is $9n + k$, where k is an integer.

The 8th term of sequence **A** is equal to the 5th term of sequence **B**.

Work out the value of k .

[4 marks]

$$k = \underline{\hspace{10em}}$$

10 When rounded to 2 decimal places, $d = 4.38$

Complete the error interval for d .

[2 marks]

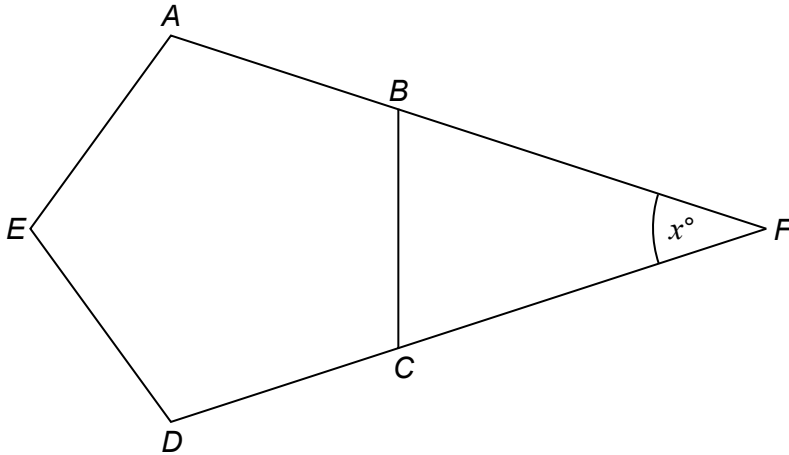
$$\underline{\hspace{10em}} \leq d < \underline{\hspace{10em}}$$





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11



ABCDE is a regular pentagon.
ABF and *DCF* are straight lines.

Work out the size of the angle marked *x*.

[4 marks]

Answer _____ °

10

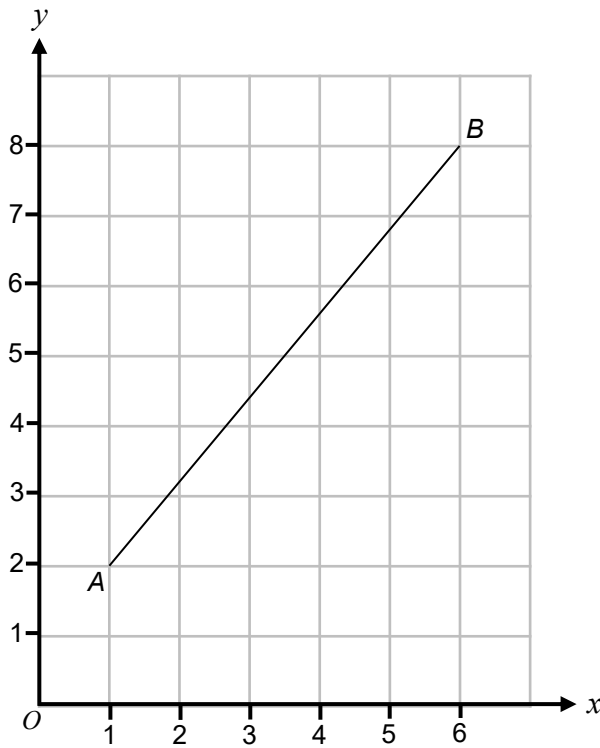
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12 The diagram below shows a line segment AB drawn on a centimetre grid.



12 (a) Work out the gradient of the line segment AB . [2 marks]

Answer _____

12 (b) Work out the length of the line segment AB to 2 decimal places. [2 marks]

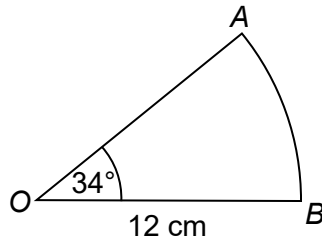
Answer _____ cm





Do not write
outside the
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13 OAB is a sector of a circle.



Not drawn
accurately

13 (a) Work out the area of the sector.
Give your answer to 1 decimal place. [2 marks]

Answer _____ cm^2

13 (b) Work out the length of the arc AB .
Give your answer to 1 decimal place. [2 marks]

Answer _____ cm

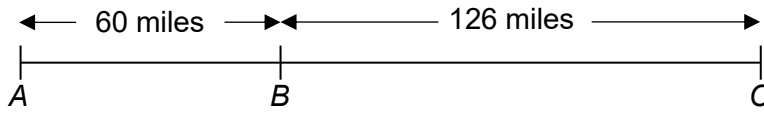
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14 Towns A , B and C are connected by straight roads.



The distance between town A and town B is 60 miles.
The distance between town B and town C is 126 miles.

Jeremy drives with a constant speed from town A to town B in 1h 30 minutes.

Jeremy then drives from town B to town C , but he increases his constant speed by 35%.

Work out how long it takes Jeremy to travel between towns B and C .
Give your answer in hours and minutes.

[4 marks]

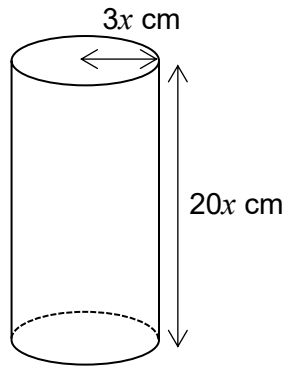
Answer _____ hours _____ minutes





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16 Here is a cylinder.



The radius of the cylinder = $3x \text{ cm}$
The height of the cylinder = $20x \text{ cm}$

The surface area of the cylinder = $k\pi x^2$

Work out the value of k .

[4 marks]

$k =$ _____





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17 The equation of line L_1 is $y = 5x + 10$
The equation of line L_2 is $2y - 10x = 5$

Show that lines L_1 and L_2 are parallel.
Do not use a graphical method.

[3 marks]

18 Prove algebraically that $0.81\dot{3}$ converts to the fraction $\frac{61}{75}$

[3 marks]

$\frac{1}{10}$

Turn over ►





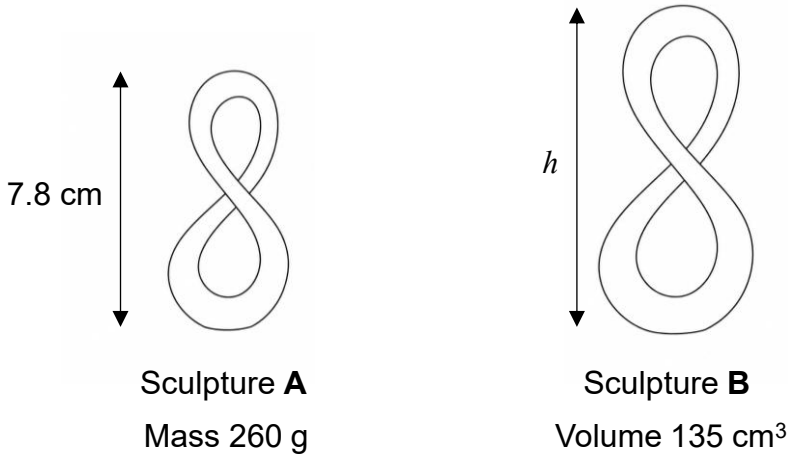
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19

Similar sculptures **A** and **B** are made from a metal with a density of 6.5 g/cm^3

Sculpture **A** has a height of 7.8 cm and a mass of 260 g

Sculpture **B** has a volume of 135 cm^3



Work out the value of h , the height of sculpture **B**.

[4 marks]

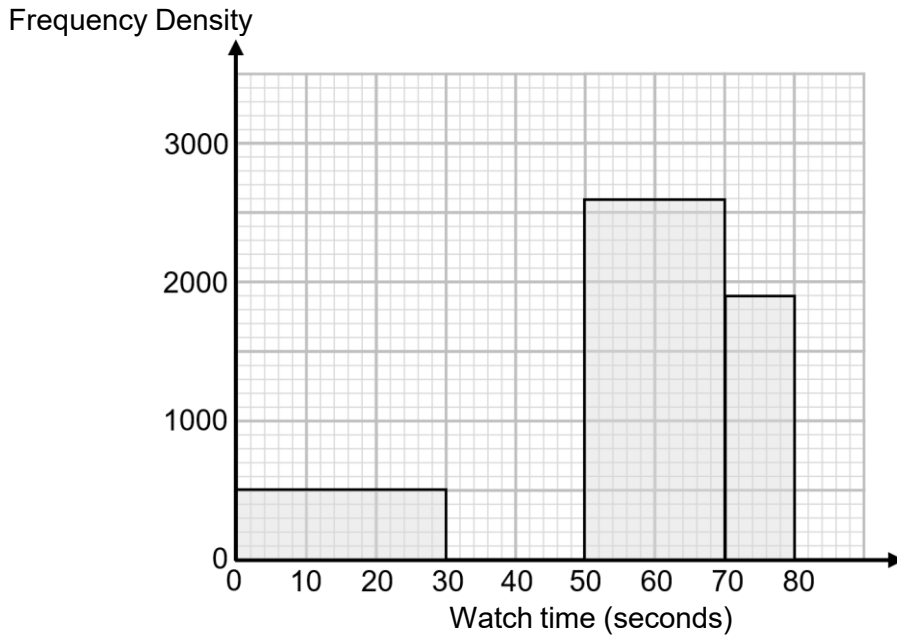
$h =$ _____ cm





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20 The incomplete histogram shows information about the amount of time viewers spent watching an 80-second-long video on social media.



20 (a) 34000 viewers watched for between 30 and 50 seconds. Complete the histogram.

[1 mark]

20 (b) The creator of the video receives 65p for every 1000 views that are for 60 seconds or more and no money for views less than 60 seconds.

Work out an estimate for the amount of money the creator made for this video.

[4 marks]

Answer £ _____

$\frac{\quad}{9}$

Turn over ►



