1st Class Maths

Video Solutions

SCAN ME

PRACTICE PAPER FOR

Edexcel Paper 2H (June 2026)

---------- Disclaimer ----------

This paper has been created based on some of the common paper 2/3 topics from previous years and also careful analysis of what topics have already appeared in paper 1. 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**.

You can find a link to this paper and more completely free resources at www.1stclassmaths.com

Answer ALL questions

Write your answers in the spaces provided

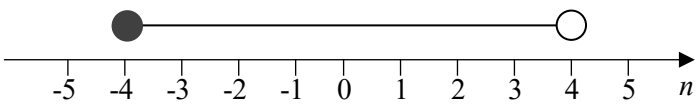
You must write down all the stages in your working.

1 Expand and simplify $8(c - 1) - 3(2c - 5)$

.....

(Total for Question 1 is 2 marks)

2 The number line below shows an inequality for n.



(a) Given that n is an integer, write down the greatest possible value of n.

.....

(1)

(b) Solve $5x + 4 \geq 20$

.....

(2)

(Total for Question 2 is 3 marks)

3 (a) Use your calculator to work out $\sqrt{9 - \frac{2.1^4}{\pi}}$

Write down all the figures on your calculator display.

.....

(2)

(b) Round your answer from part (a) to 3 significant figures.

.....

(1)

(Total for Question 3 is 3 marks)

4 Change a speed of 15 metres per second into kilometres per hour.

..... kilometres per hour

(Total for Question 4 is 3 marks)

5 The table shows information about the population of five different countries.

Country	Population
Estonia	1.4×10^6
France	6.8×10^7
Germany	8.4×10^7
Hungary	9.6×10^6
San Marino	3.4×10^4

(a) Write down the name of the country with the greatest population.

.....

(1)

(b) Write down the name of the country with the median population.

.....

(1)

(c) Work out how many times greater the population of France is than the population of San Marino.
Give your answer as an ordinary number.

.....

(2)

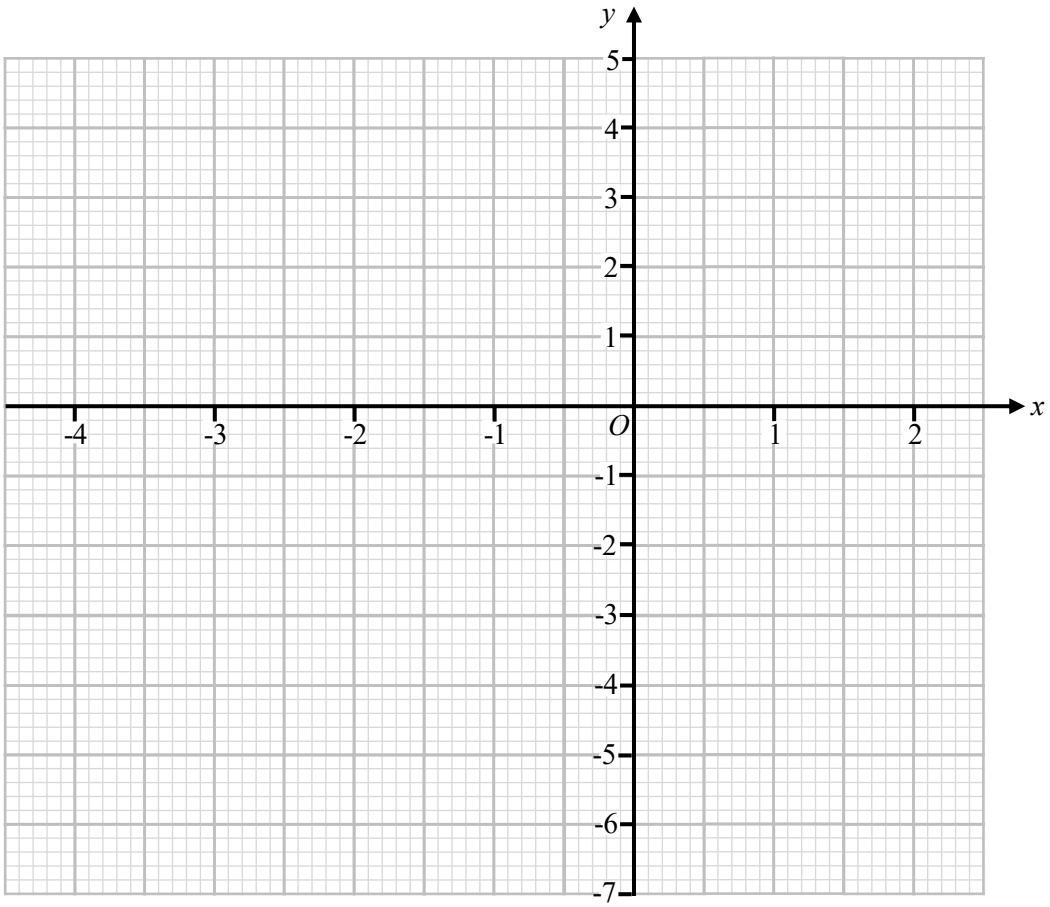
(Total for Question 5 is 4 marks)

6 (a) Complete the table of values for $y = x^2 + 2x - 4$

x	-4	-3	-2	-1	0	1	2
y		-1		-5		-1	4

(2)

(b) On the grid, draw the graph of $y = x^2 + 2x - 4$ for values of x from to -4 to 2



(2)

(c) Use your graph to estimate the roots of the equation $x^2 + 2x - 4 = 0$

.....

(2)

(Total for Question 6 is 6 marks)

Turn over ▶

7 The table shows information about the masses of 20 metal bolts produced by a company.

Mass, m (g)	Frequency
$20 < m \leq 30$	4
$30 < m \leq 40$	5
$40 < m \leq 50$	9
$50 < m \leq 60$	2

(a) Work out an estimate for the mean mass of the 20 bolts.

..... g

(3)

Each bolt is made from a metal with a density of 8 g/cm^3

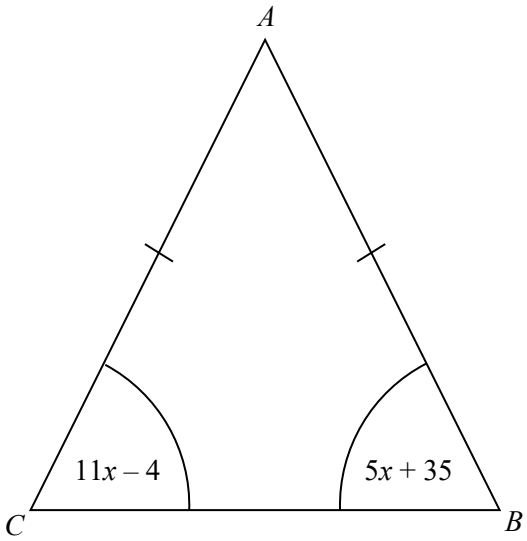
(b) Work out the volume a bolt that has a mass of 44 g

..... cm^3

(2)

(Total for Question 7 is 5 marks)

8 ABC is a triangle.



$AB = AC$

All angles are measured in degrees.

Find the size of angle CAB.

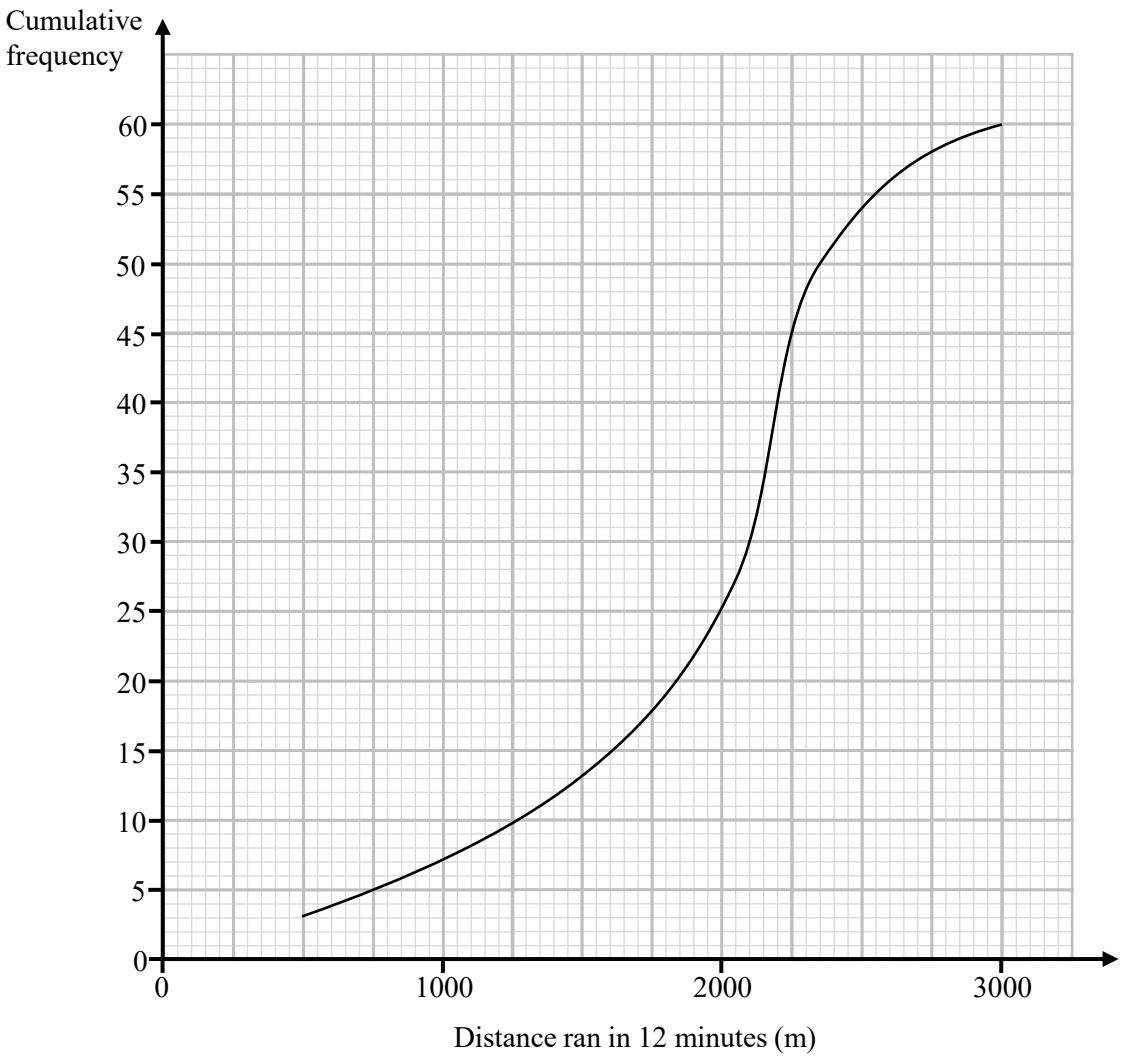
°

.....

(Total for Question 8 is 5 marks)

9 60 students from Year 9 and 60 students from Year 10 take part in a 12 minute run.

The cumulative frequency graph shows information about the distances, in metres, ran by the **Year 9** students during the 12 minute run.



(a) Use the graph to find an estimate for the median distance ran by Year 9 students.

..... m

(1)

(b) Use the graph to find an estimate for the interquartile range of the distances ran by Year 9 students.

..... m

(2)

The table below shows information about the distances ran by the **Year 10** students.

Year 10 Students	
Median	2300 m
Interquartile Range	800 m

(c) Use the information above and your answers to parts (a) and (b) to compare the distances ran by the Year 9 and Year 10 students.

.....

.....

.....

.....

.....

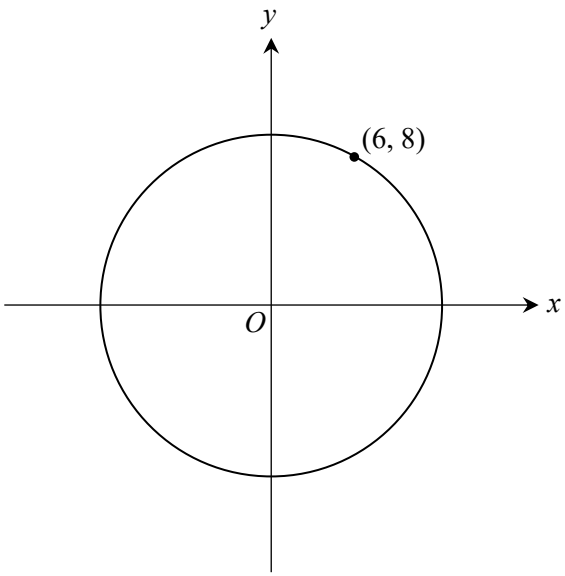
.....

(2)

(Total for Question 9 is 5 marks)

Turn over ▶

10 A circle, centre O, passes through the point (6, 8)



Work out the equation of the circle.

.....

(Total for Question 10 is 2 marks)

11 $\mathbf{L_1}$ and $\mathbf{L_2}$ are perpendicular lines.

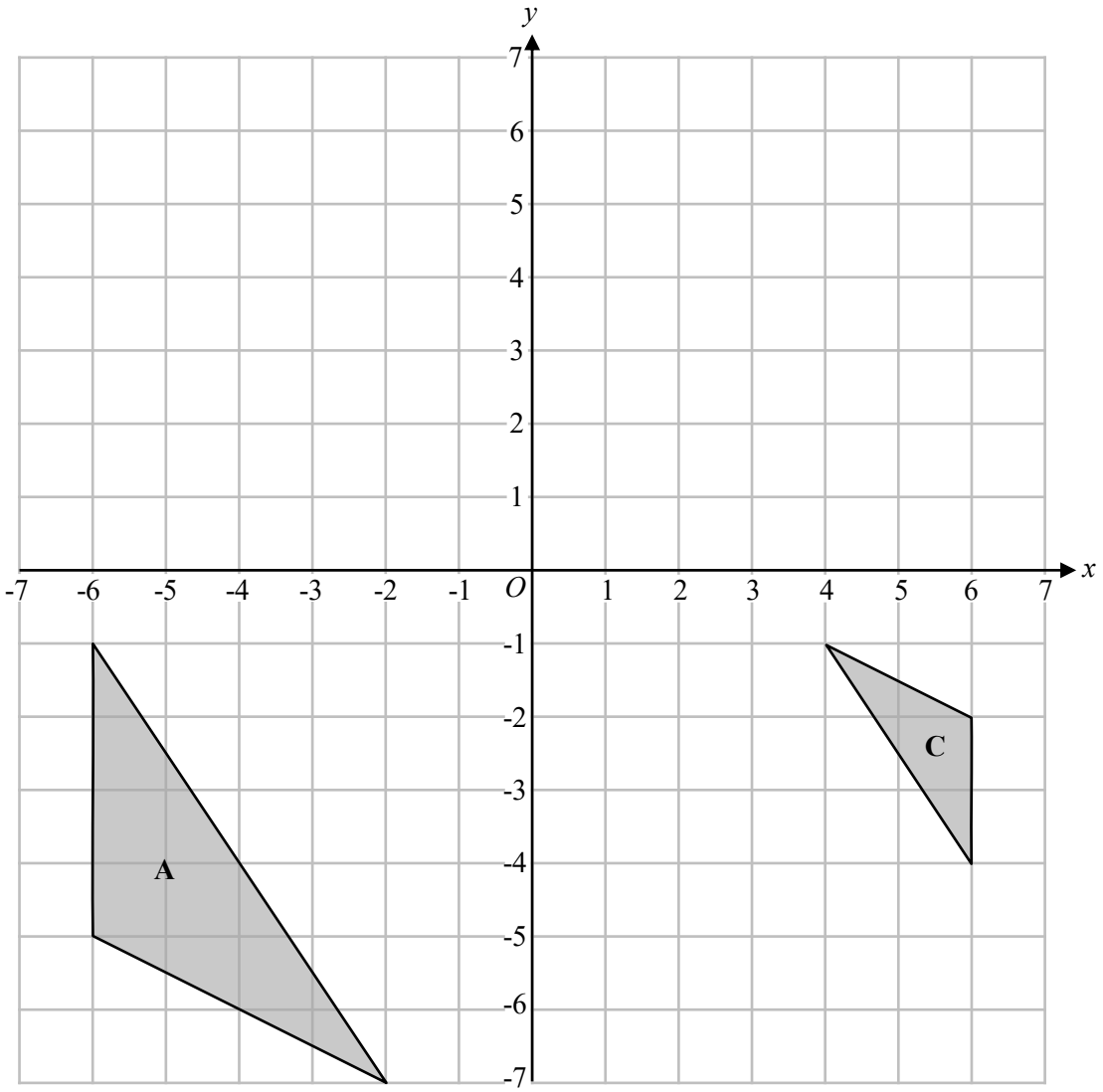
The equation of $\mathbf{L_1}$ is $y = 3x + 4$
The equation of $\mathbf{L_2}$ is $y = kx + 5$

Write down the value of k.

$k =$ .....

(Total for Question 11 is 1 mark)

12



Triangle **A** is enlarged, with centre of enlargement (0, 1), to give triangle **B**.

Triangle **B** is then translated by the vector $\begin{pmatrix} p \\ q \end{pmatrix}$ to give triangle **C**.

(a) Draw triangle **B** onto the grid above. **(2)**

(b) Write down the values of p and q.

$p =$ .....

$q =$ .....

(2)

(Total for Question 12 is 4 marks)

Turn over ▶

13 x and y are positive integers.

(a) Simplify xy^0

.....

(1)

(b) Simplify $\left(\frac{x^{400}}{x^{256}}\right)^{\frac{3}{2}}$

.....

(2)

(Total for Question 13 is 3 marks)

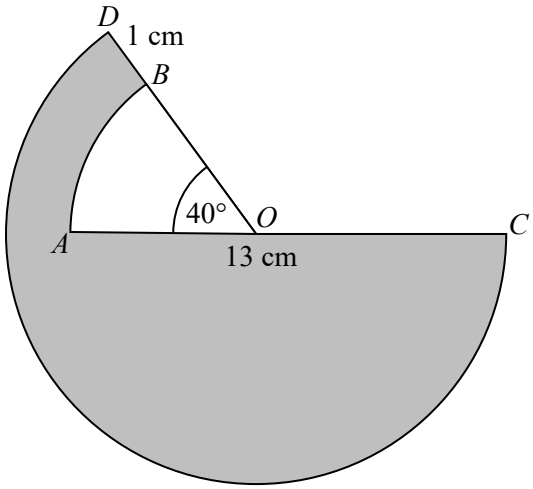
14 Isaac creates a 3-digit code where each digit is a number from 1 to 9.

Work out how many different codes can Isaac make where **at least** one of the digits is a prime number.

.....

(Total for Question 14 is 3 marks)

15 The diagram below shows sector OAB and sector OCD.



AOC is a straight line.

Angle $AOB = 40°$
$AC = 13$ cm
$BD = 1$ cm

Find the area of the shaded region.
Give your answer to 3 significant figures.

..... cm^2

(Total for Question 15 is 5 marks)

Turn over ▶

16 x is directly proportional to $\sqrt{y}$

y is inversely proportional to z^3

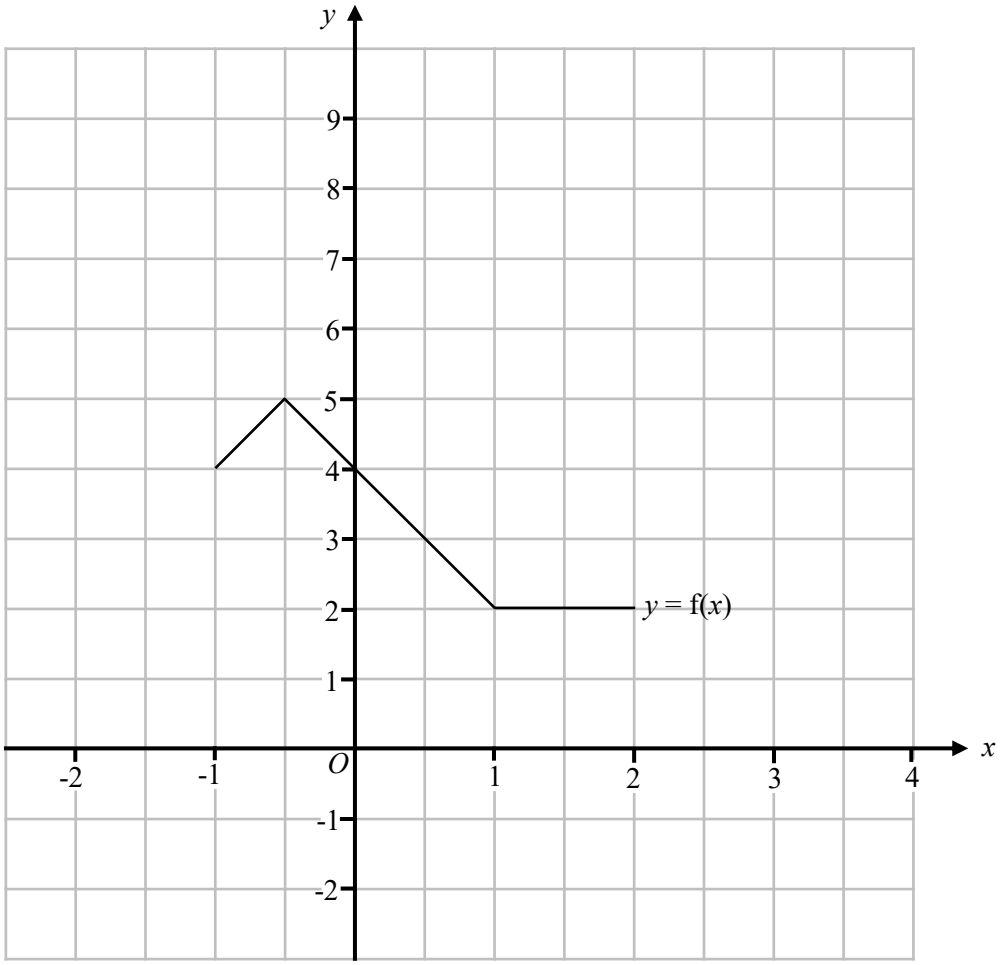
When $x = 0.8$, $y = 0.16$ and $z = 5$

Find the value of x when $z = 20$

.....

(Total for Question 16 is 4 marks)

17 The graph of $y = f(x)$ is shown on the grid below.



Draw the graph of $y = f(x - 1) + 2$ onto the grid above.

(Total for Question 17 is 2 marks)

18 The value of a house increases by x% each year.

In 2023 the house was valued at £224,000 (to the nearest thousand)
In 2026 the same house was valued at £268,000 (to the nearest thousand)

Work out the upper bound for the value of x.
Give your answer to 1 decimal place.

.....

(Total for Question 18 is 4 marks)

19 $f(x) = x - 1$ $\quad g(x) = \dfrac{x}{5 - x}$

$h(x) = gf(x)$

Find $h^{-1}(x)$

$h^{-1}(x) =$ .....

(Total for Question 19 is 5 marks)

20 Bag A and bag B both contain only blue and red counters.

Bag A contains 8 blue counters and 4 red counters.
Bag B contains 6 blue counters and x red counters.

A counter is taken at random from bag A and placed into bag B.
A counter is then taken at random from bag B.

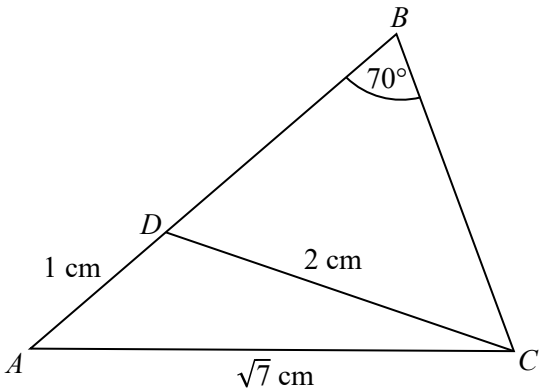
The probability that the counter taken from bag B is red is $\frac{2}{3}$

Work out the value of x.

$x =$ .....

(Total for Question 20 is 5 marks)

21 Here is triangle ABC.



$AC = \sqrt{7}$ cm
D is a point on the line AB such that

$AD = 1$ cm
$CD = 2$ cm
Angle $DBC = 70°$

Find the area of triangle BCD
Give your answer to 3 significant figures.

..... cm^2

(Total for Question 21 is 6 marks)

TOTAL FOR PAPER IS 80 MARKS