Please check the examination details below before entering your candidate information

Candidate surname	Other names

Centre Number | Candidate Number

Pearson Edexcel Level 1/Level 2 GCSE (9–1)

Wednesday 3 June 2026

Morning (Time: 1 hour 30 minutes)

Paper reference **1MA1/2H**

Mathematics

PAPER 2 (Calculator)
Higher Tier

You must have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB or B pencil, eraser, calculator, Formulae Sheet (enclosed). Tracing paper may be used.

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- If pencil is used for diagrams/sketches/graphs it must be dark (HB or B).
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- You must **show all your working**.
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- **Calculators may be used**.
- If your calculator does not have a π button, take the value of π to be 3.142 unless the question instructs otherwise.

Information

- The total mark for this paper is 80
- The marks for **each** question are shown in brackets – *use this as a guide as to how much time to spend on each question.*

Advice

- Read each question carefully before you start to answer it.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ▶

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P 7 9 4 7 5 A 0 1 2 0

Pearson

Answer ALL questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

1 (a) Find the lowest common multiple (LCM) of 12 and 34

.....

(2)

(b) Find the highest common factor (HCF) of 98 and 140

.....

(2)

(Total for Question 1 is 4 marks)

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2 (a) Expand and simplify $(x + 7)(x - 9)$

.....

(2)

(b) Solve $20 + 3x = 7x - 12$

$x =$ .....

(3)

(Total for Question 2 is 5 marks)

3 The size of each interior angle of a regular polygon is 156°

Work out the number of sides of the polygon.

.....

(Total for Question 3 is 2 marks)

4 Serena wants to make a total of 180 bags of beads to sell at a fair.
She will make small bags and large bags where

number of small bags : number of large bags = 7 : 5

Each small bag will contain 65 grams of beads.
Each large bag will contain 145 grams of beads.

Serena thinks she will need less than 17 kilograms of beads to fill 180 bags.

Is Serena correct?
You must show how you get your answer.

(Total for Question 4 is 5 marks)

5 (a) Write 0.000 004 5 in standard form.

.....

(1)

A space satellite orbits around the Earth.

The satellite travels a distance of 4.48×10^4 kilometres for each orbit around the Earth.

The satellite travels a total distance of 2.016×10^7 kilometres in 30 days.

(b) How many minutes does the satellite take to complete each orbit around the Earth?

..... minutes

(4)

(Total for Question 5 is 5 marks)

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6 Harry invests £3800 in a savings account.
The account pays compound interest at a rate of 4.2% per year for 3 years.

At the end of 3 years, Harry puts an extra £2500 into the account.

In the fourth year, the annual interest rate of the account changes to 5.6%

Calculate the total amount of money in the account at the end of the fourth year.

£.....

(Total for Question 6 is 4 marks)

7 The height of a plant is 70 cm, correct to the nearest 5 cm.

Maggie is asked to write down the error interval for the height, in cm, of this plant.

Here is her working.

$$70 - 5 \leqslant \text{height} < 70 + 5$$

$$65 \leqslant \text{height} < 75$$

Maggie's method is wrong.

Explain what is wrong with Maggie's method.

.....

.....

.....

(Total for Question 7 is 1 mark)

8 There are 36 apples and 27 oranges in a box.

The apples have a mean weight of x grams.
The oranges have a mean weight of y grams.

Show that the apples and oranges have a mean weight of $\frac{4x + 3y}{7}$ grams.

(Total for Question 8 is 3 marks)

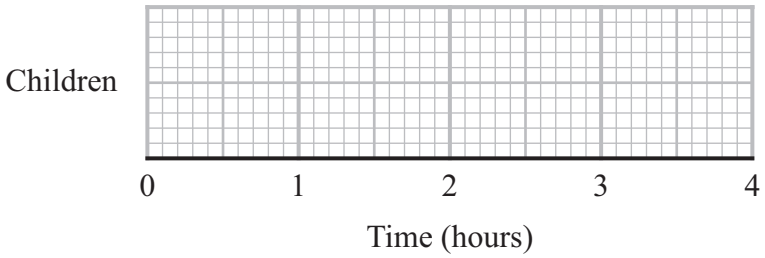
9 The stem and leaf diagram shows the times, in hours, some children spent walking last week.

0	5	8				
1	0	3	4	7		
2	0	1	3	5	8	9
3	2	5	6			

Key:

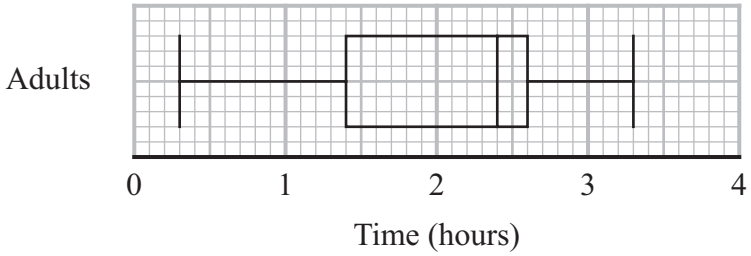
0 | 5 represents 0.5 hours

(a) Draw a box plot to represent this information.



(3)

The box plot below shows information about the times, in hours, some adults spent walking last week.



(b) Compare the distribution of the times the children spent walking last week with the distribution of the times the adults spent walking last week.

.....

.....

.....

.....

(2)

(Total for Question 9 is 5 marks)

10 Florence has two biased coins, A and B.

The probability that coin A will land on tails is 0.2
The probability that coin B will land on tails is 0.7

Florence throws each coin once.

Work out the probability that **at least one** of the coins will land on tails.

.....

(Total for Question 10 is 3 marks)

11 x is an integer such that $1 \leqslant 4x + 7 < 23$

Find all the possible values of x.

.....

(Total for Question 11 is 3 marks)

12 Polly is making candles.
She will choose one colour, one shape and one scent to make each candle.

Polly has 13 different colours.
She has 9 different shapes.

Polly can make 1287 different candles.

How many different scents does Polly have?

.....

(Total for Question 12 is 2 marks)

13 Klaus has a large jar of £1 coins.
He wants to work out an estimate for the total value of the £1 coins.

Klaus takes at random 18 coins from the jar.
He puts a sticker on each of these coins.
He puts all of these coins back in the jar.

Klaus then shakes the jar and takes at random 50 coins from the jar.
There is a sticker on 4 of the 50 coins.

Work out an estimate for the total value of the coins in the jar.

£.....

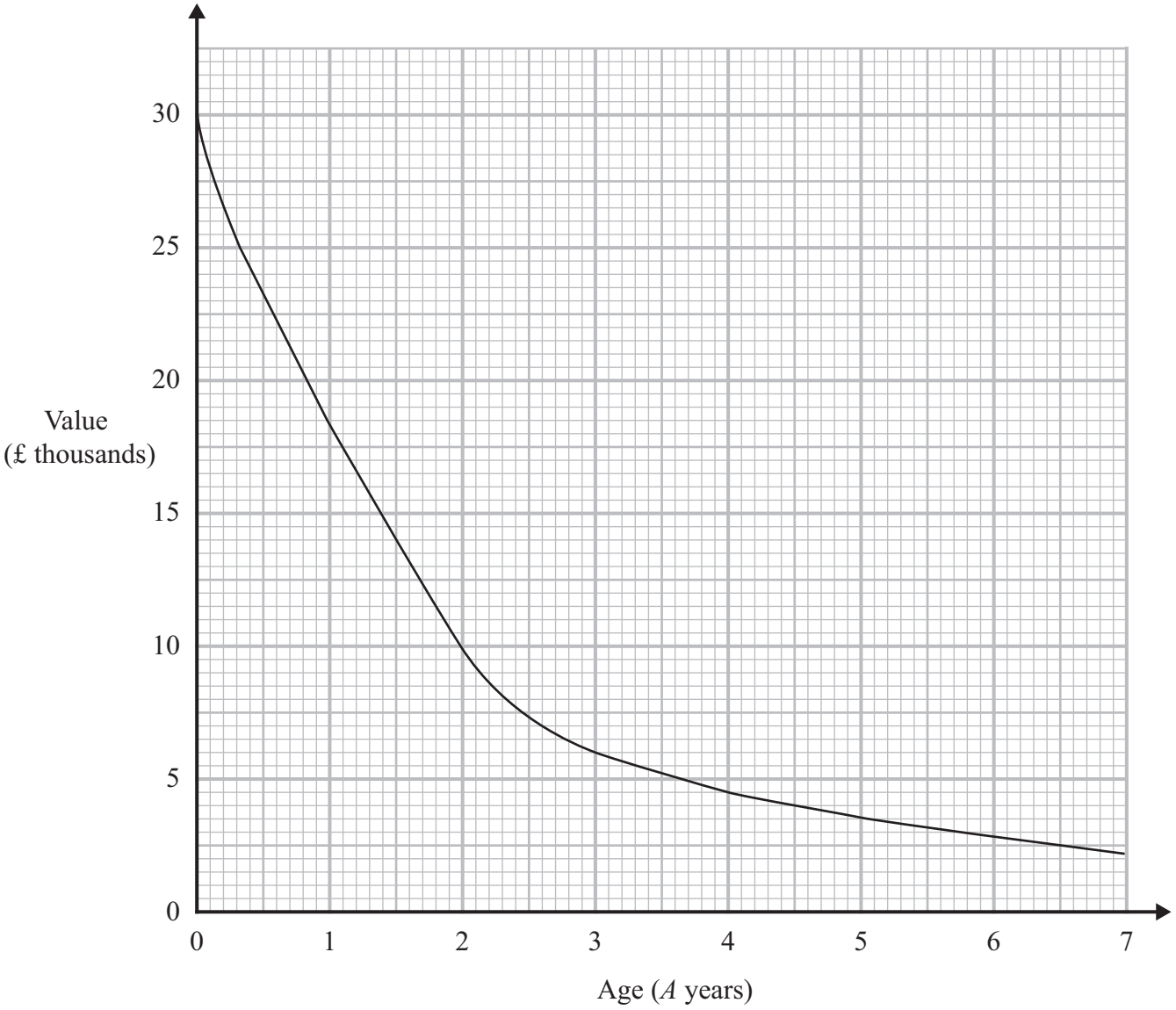
(Total for Question 13 is 3 marks)

14 Solve $6x^2 = 7 - 4x$
Give your solutions correct to 3 significant figures.

.....

(Total for Question 14 is 3 marks)

15 The graph shows the value of a car, in thousands of pounds, at age A years.



(a) Find an estimate for the gradient of the graph when $A = 2.5$
You must show how you get your answer.

.....

(3)

(b) What does the gradient of the graph represent?

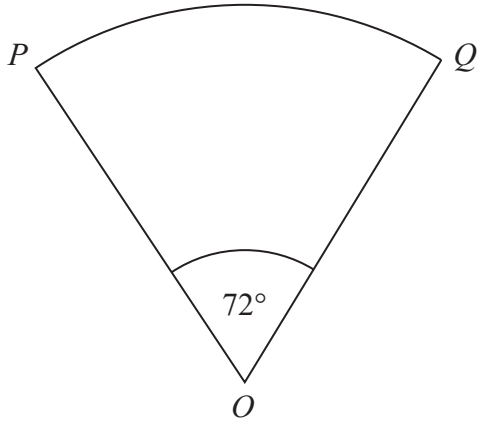
.....

.....

(1)

(Total for Question 15 is 4 marks)

16 OPQ is a sector of a circle with centre O.



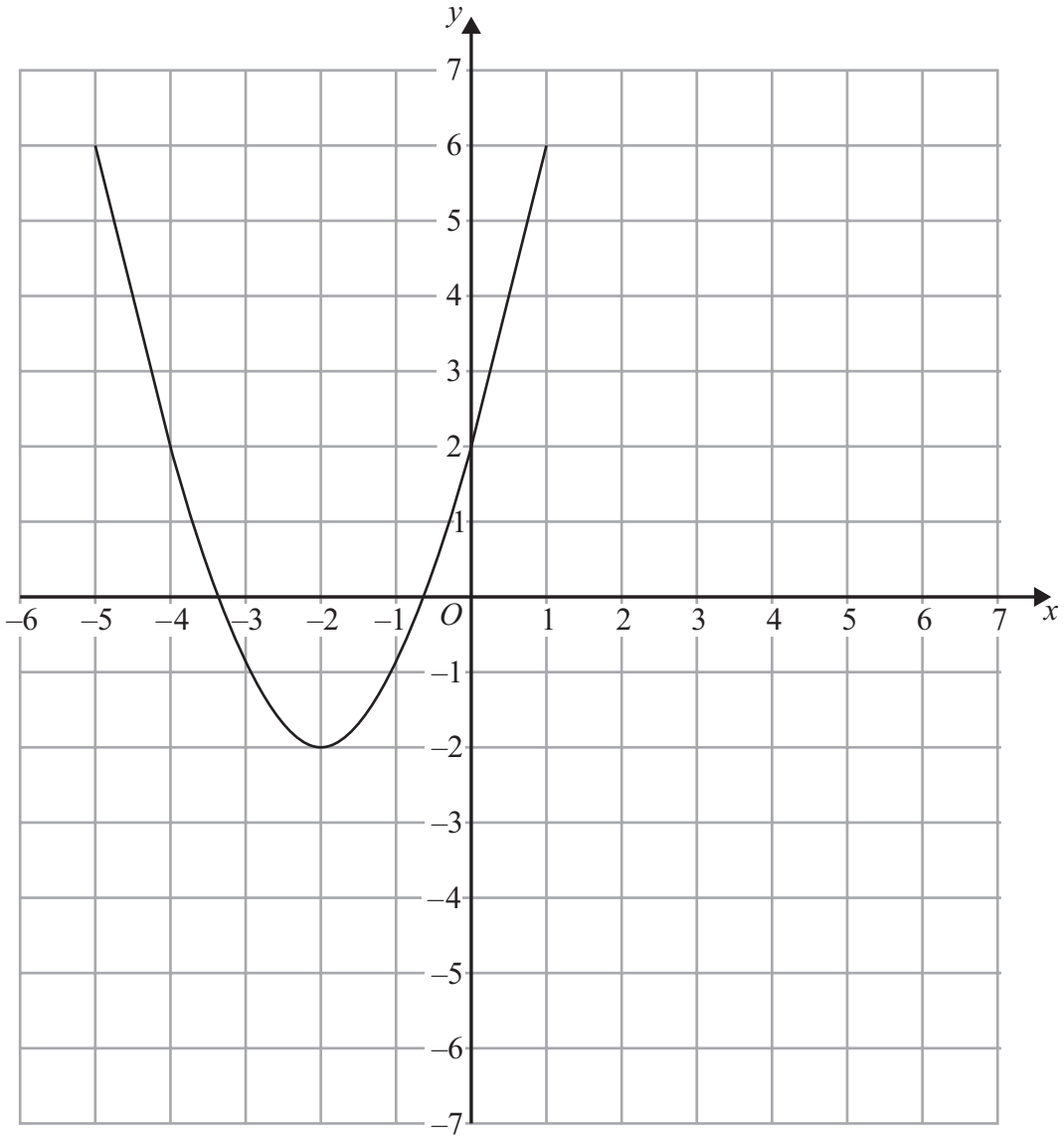
The length of the arc PQ is $\frac{13\pi}{10}$ cm.

Work out the area of the circle.
Give your answer correct to 3 significant figures.

..... cm^2

(Total for Question 16 is 4 marks)

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



On the grid, sketch the graph of $y = -f(x - 3)$

(Total for Question 17 is 2 marks)

18 Show that $\frac{1}{4x} - \frac{5}{3x} + 2$ can be written in the form $\frac{ax - b}{cx}$ where a, b and c are integers.

(Total for Question 18 is 3 marks)

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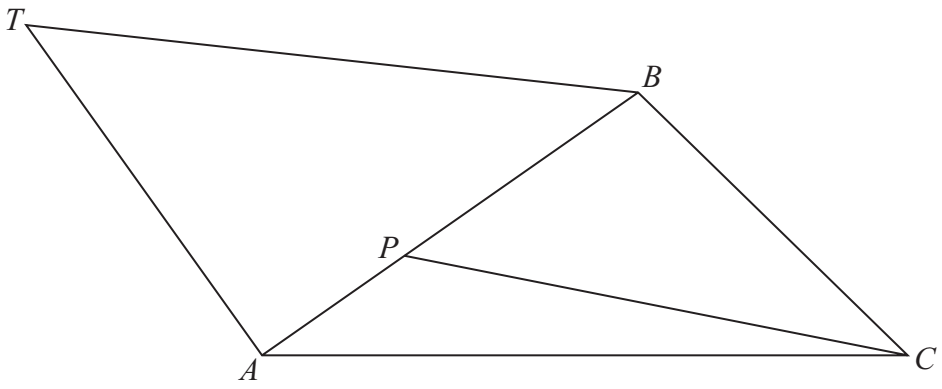
19 The diagram shows triangle ABC and triangle ABT.



$\overrightarrow{CA} = \mathbf{a}$ $\overrightarrow{CB} = \mathbf{b}$ $\overrightarrow{AT} = m\mathbf{b}$

P is the point on AB such that $AP : PB = 1 : 3$

CP is parallel to BT.

Use a vector method to find the value of m.
You must show all your working.

$m =$ .....

(Total for Question 19 is 5 marks)

20 The functions f and g are such that

$$f(x) = \frac{7 - 8x}{3}$$

$$g(x) = (2x - 7)^3$$

(a) Find gf(–1)

.....

(2)

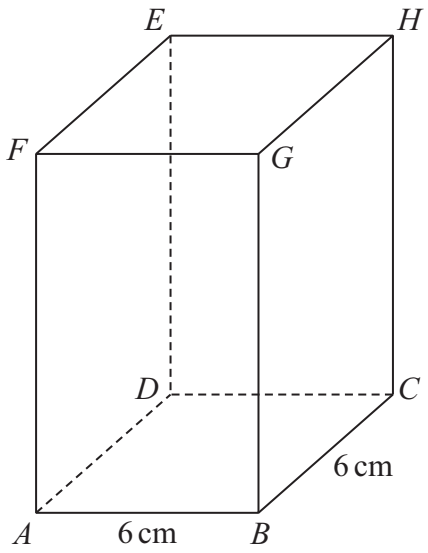
(b) Find $g^{-1}(729)$

.....

(3)

(Total for Question 20 is 5 marks)

21 The diagram shows the cuboid *ABCDEFGH*.



Angle *AED* = 30°

Calculate the size of angle *AEC*.
Give your answer correct to 1 decimal place.

°

(Total for Question 21 is 5 marks)

22 A solid cuboid is placed on a horizontal table.

$$\text{pressure} = \frac{\text{force}}{\text{area}}$$

The cuboid has a volume of $(168 - 42\sqrt{x})$ cm^3
The cuboid has a height of 14 cm.

The cuboid exerts a force of 36 newtons on the table.

Show that the pressure on the table due to the cuboid can be written in the form

$\frac{a + b\sqrt{x}}{c - x}$ newtons/cm^2 where a, b and c are integers.

(Total for Question 22 is 4 marks)

TOTAL FOR PAPER IS 80 MARKS

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Pearson Edexcel GCSE (9–1) Mathematics

Wednesday 3 June 2026 – Morning

Paper reference **1MA1/2H**

Mathematics

PAPER 2 (Calculator)
Higher Tier

Formulae Sheet
Do not return this Sheet with the question paper.

Turn over ▶

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Pearson

Higher Tier Formulae Sheet

Perimeter, area and volume

Where a and b are the lengths of the parallel sides and h is their perpendicular separation:

Area of a trapezium = $\frac{1}{2}(a + b)\,h$

Volume of a prism = area of cross section × length

Where r is the radius and d is the diameter:

Circumference of a circle = $2\pi r = \pi d$

Area of a circle = πr^2

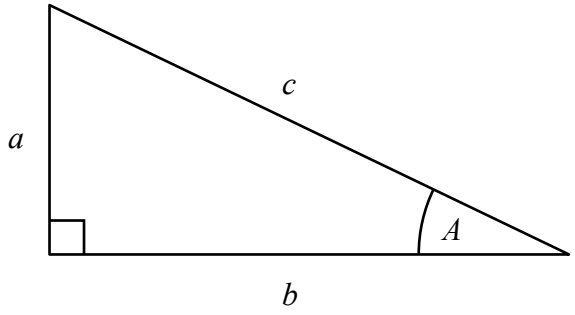
Quadratic formula

The solution of $ax^2 + bx + c = 0$

where $a \neq 0$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Pythagoras' Theorem and Trigonometry

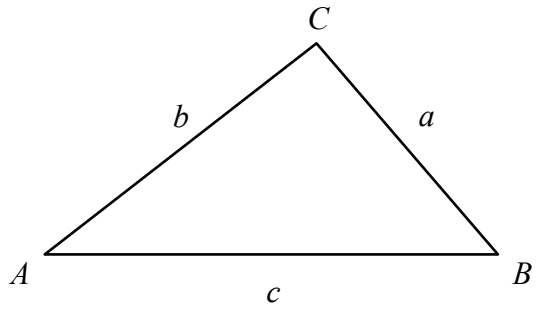


In any right-angled triangle where a, b and c are the length of the sides and c is the hypotenuse:

$a^2 + b^2 = c^2$

In any right-angled triangle ABC where a, b and c are the length of the sides and c is the hypotenuse:

$$\sin A = \frac{a}{c} \quad \cos A = \frac{b}{c} \quad \tan A = \frac{a}{b}$$



In any triangle ABC where a, b and c are the length of the sides:

sine rule: $\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$

cosine rule: $a^2 = b^2 + c^2 - 2bc \cos A$

Area of triangle = $\frac{1}{2}\,a\,b \sin C$

Compound Interest

Where P is the principal amount, r is the interest rate over a given period and n is number of times that the interest is compounded:

Total accrued = $P\left(1 + \frac{r}{100}\right)^n$

Probability

Where P (A) is the probability of outcome A and P (B) is the probability of outcome B:

P (A or B) = P (A) + P (B) – P (A and B)

P (A and B) = P (A given B) P(B)

END OF EXAM AID