Please check the examination details below before entering your candidate information

Candidate surname	Other names

Centre Number | Candidate Number

Spring 2026

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

AIMING FOR GRADE 7

29 marks (30 minutes)

Paper reference **1MA1/3H**

Mathematics

Paper 3 (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.
- **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.**

Information

- The total mark for this paper is 29. There are 10 questions.
- Questions have been broadly arranged in an ascending order of mean difficulty, as found by students achieving Grade 7 in the Summer and November 2025 examinations.
- Questions marked with an asterisk (*) also appear on the Foundation Tier paper.
- 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.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Answer all questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

*** 1** Eric buys a car for £19 950
Every year the car loses 5% of the value it had at the start of the year.

Eric works out the value of his car 4 years after he bought it.

Here is Eric's working.

$$4 \times 5\% = 20\%$$
$$0.2 \times 19\,950 = 3990$$
$$19\,950 - 3990 = 15\,960$$

Eric's method is wrong.

(a) Explain why.

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.....

.....

(1)

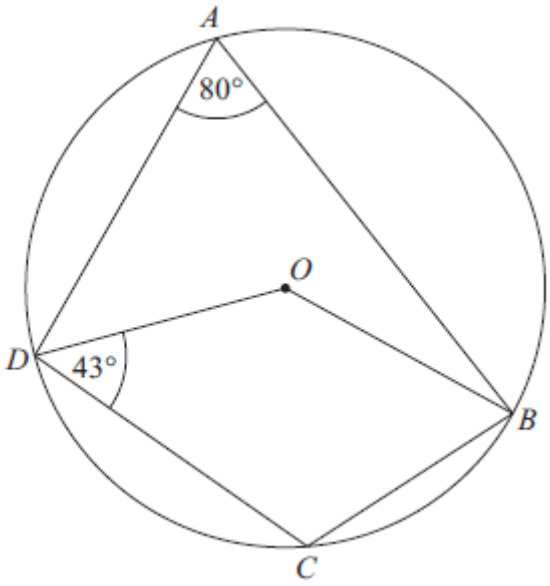
(b) Work out the difference between Eric's answer of £15 960 and the real value of the car 4 years after he bought it.

£.....

(4)

(Total for Question 1 is 5 marks)

2 A, B, C and D are points on a circle with centre O.



Find the size of angle OBC.
Write down any circle theorems that you use.

.....°

(Total for Question 2 is 4 marks)

3 The functions f and g are such that

$$f(x) = 3x - 6 \qquad g(x) = \frac{2x^2}{x^2 + 1}$$

Find $f^{-1}(9)$

.....

(Total for Question 3 is 2 marks)

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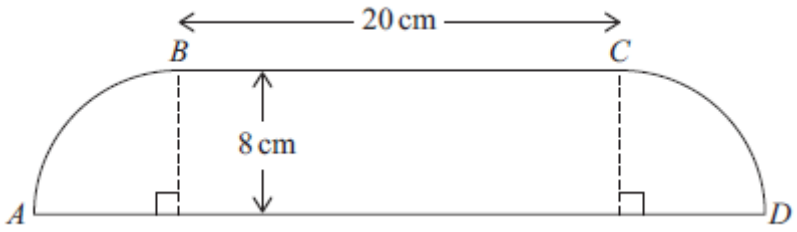
4 In the diagram, *AB* and *CD* are quarter circles of radius 8 cm.
AD is a straight line.
BC = 20 cm



Work out the perimeter of shape *ABCD*.
Give your answer correct to 3 significant figures.

..... cm

(Total for Question 4 is 3 marks)

5 $w = 3x - y$

$x = 8.71$ correct to 3 significant figures.
$y = 24.3$ correct to 3 significant figures.

Work out the lower bound for the value of w.
You must show all your working.

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(Total for Question 5 is 3 marks)

*** 6** Factorise fully $2x^3y + 4xy^2$

.....

(Total for Question 6 is 2 marks)

7 Write $\left(64m^{12}\right)^{\frac{2}{3}}$ in the form am^b where a and b are integers.

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(Total for Question 7 is 2 marks)

*** 8** Work out the value of the reciprocal of 1.25

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(Total for Question 8 is 1 mark)

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9 There are only blue counters and red counters in a box.
There are 5 times as many blue counters as red counters.

Ashley takes at random one counter from the box.
He records the colour of the counter, then puts the counter back in the box.
Ashley does this 3 times.

(a) Find the probability that Ashley takes a counter of the same colour all 3 times.

.....

Total for Question 9 is 3 marks)

10 There are only 7 blue pens and 3 red pens in a box.

Raja takes at random one of the pens.
He notes the colour of the pen and puts the pen back into the box.

Raja does this two more times.

Show that the probability that Raja takes at least two blue pens is $\frac{98}{125}$

(Total for Question 10 is 4 marks)

TOTAL FOR PAPER IS 29 MARKS