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

30 marks (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.
- **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 30. There are 9 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 At the start of year n, the population of deer in a park is D_n

At the start of the following year, the population of the deer is D_{n+1}

$$D_{n+1} = K D_n \quad \text{where } K \text{ is a constant.}$$

At the start of 2019, the population of the deer was 2000
At the start of 2020, the population of the deer was 2400

Show that, at the start of 2022, the population of the deer was greater than 3000

(Total for Question 1 is 3 marks)

*** 2** The number of diesel cars sold in the UK decreased by 13% between 2021 and 2022
The number of diesel cars sold in the UK in 2022 was 160 950

Calculate the number of diesel cars sold in the UK in 2021

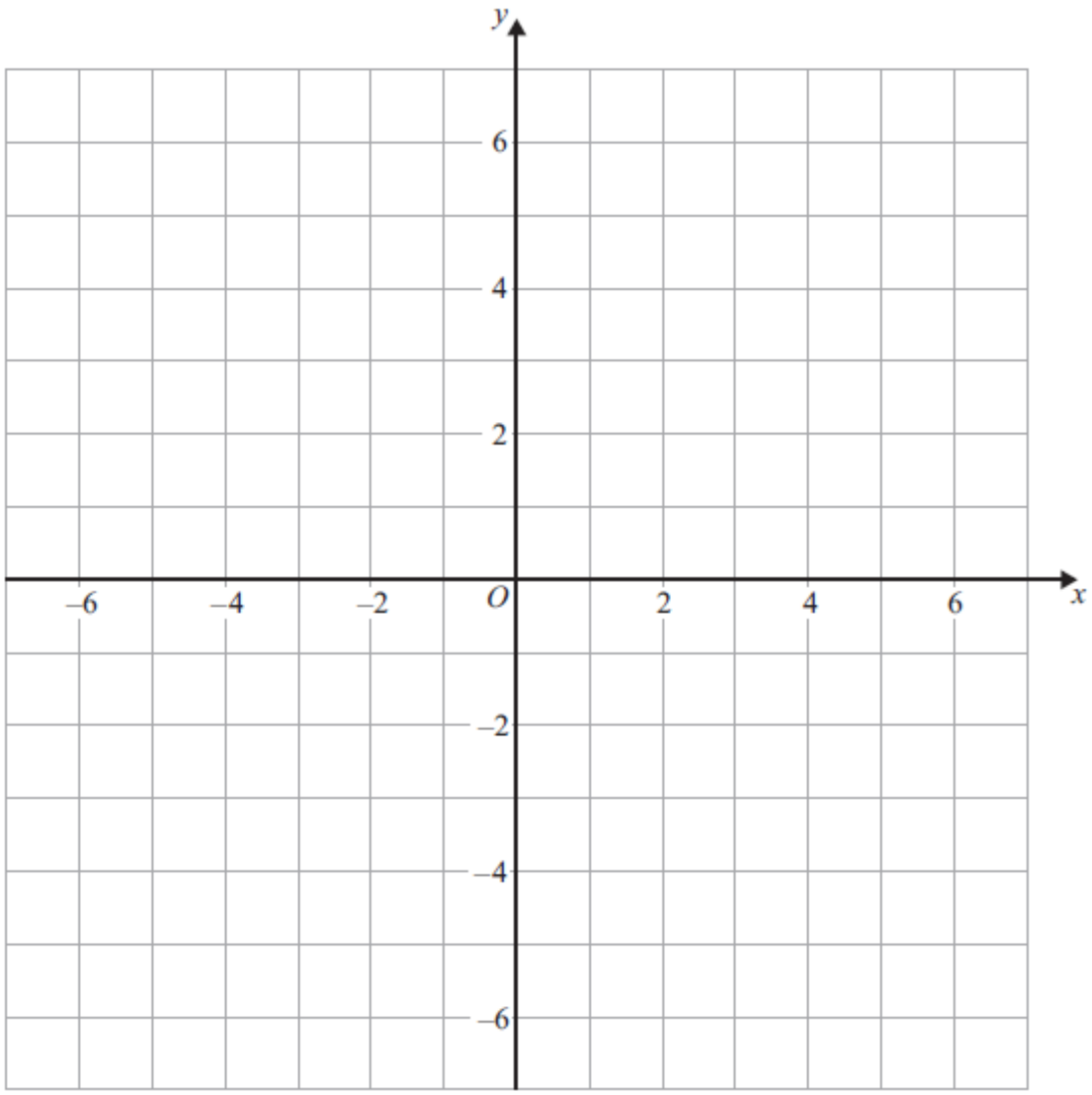
.....

(Total for Question 2 is 2 marks)

3 (a) On the grid, show by shading, the region that satisfies all of these inequalities.

$$x + y < 5 \qquad y > 1 \qquad x > 2 \qquad y < 3x - 2$$

Label the region **R**.



(4)

Ron says,

> "I can remove one of the four inequalities from the grid so that the region **R** will not change."

Ron is correct.

(b) Which inequality can be removed so that the region **R** will not change?

.....

(1)

(Total for Question 3 is 5 marks)

*** 4** 450 grams of flour is mixed with 180 grams of butter to make 630 grams of pastry mix.

The density of the flour is 0.6 g/cm^3

The density of the pastry mix is 0.672 g/cm^3

Work out the density of the butter.

..... g/cm^3

(Total for Question 4 is 4 marks)

5 Here are the first six terms of a quadratic sequence.

–4 14 42 80 128 186

Find an expression, in terms of n, for the nth term of this sequence.

.....

(Total for Question 5 is 3 marks)

*** 6** This year the total weight of potatoes grown on a farm is $\frac{1}{5}$ less than last year.

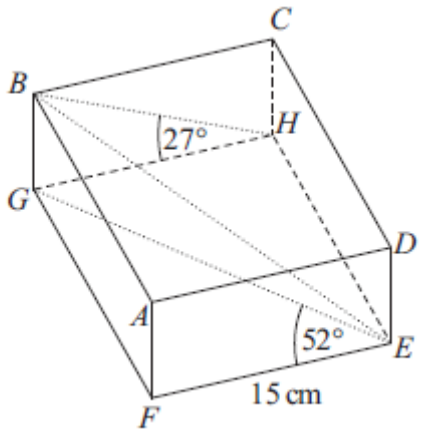
This year the total weight of potatoes grown is 8000 tonnes.

Work out the total weight of potatoes grown last year.

..... tonnes

(Total for Question 6 is 3 marks)

7 *ABCDEFGH* is a cuboid.



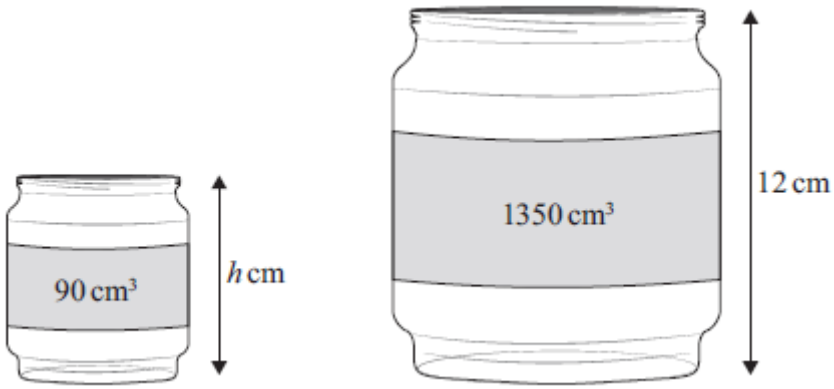
Angle *GEF* = 52°
Angle *BHG* = 27°
EF = 15 cm

Work out the size of angle *GEB*.
Give your answer to the nearest degree.

.....°

(Total for Question 7 is 4 marks)

8 Two jars are mathematically similar.

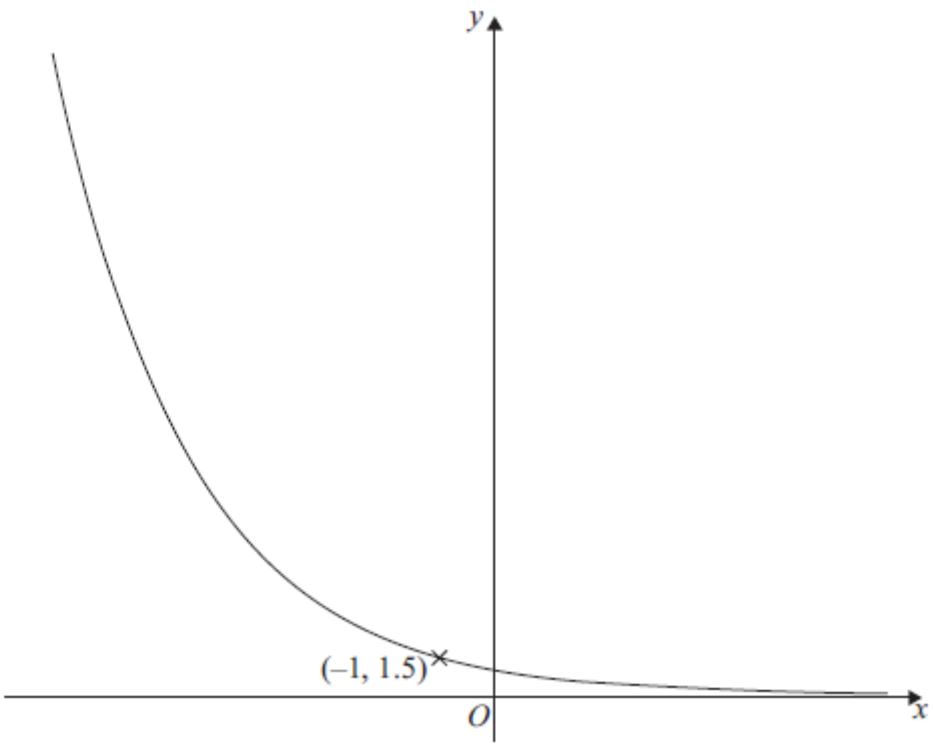


Work out the height, h cm, of the smaller jar.
Give your answer correct to 1 decimal place.

..... cm

(Total for Question 8 is 4 marks)

9 Here is a sketch of part of the graph of $y = k^x$ where k is a positive constant.



The graph passes through the point with coordinates (–1, 1.5)

Find the value of k.

k = ...

(Total for Question 9 is 2 marks)

TOTAL FOR PAPER IS 30 MARKS