

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)

Aiming for Grade 5

Paper reference	1MA1/1H
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Mathematics
PAPER 1 (Non-Calculator)
Higher Tier
31 marks 30 minutes



You must have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser, 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 not be used.**

Information

- The total mark for this paper is 31. There are 11 questions.
- Questions have been broadly arranged in an ascending order of mean difficulty, as found by students achieving Grade 5 in the Summer and November 2023 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** (a) Write down the value of 5^0

.....
(1)

- (b) Write $\frac{2^5 \times 2^4}{2^3}$ in the form 2^n where n is an integer.

.....
(2)

(Total for Question 1 is 3 marks)

- *2** (a) Write 156 as a product of its prime factors.

.....
(2)

- (b) Find the highest common factor (HCF) of 156 and 130

.....
(2)

(Total for Question 2 is 4 marks)

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- 3** The menu in a restaurant has starters, main courses and desserts.

There are 5 starters.

There are 12 main courses.

There are x desserts.

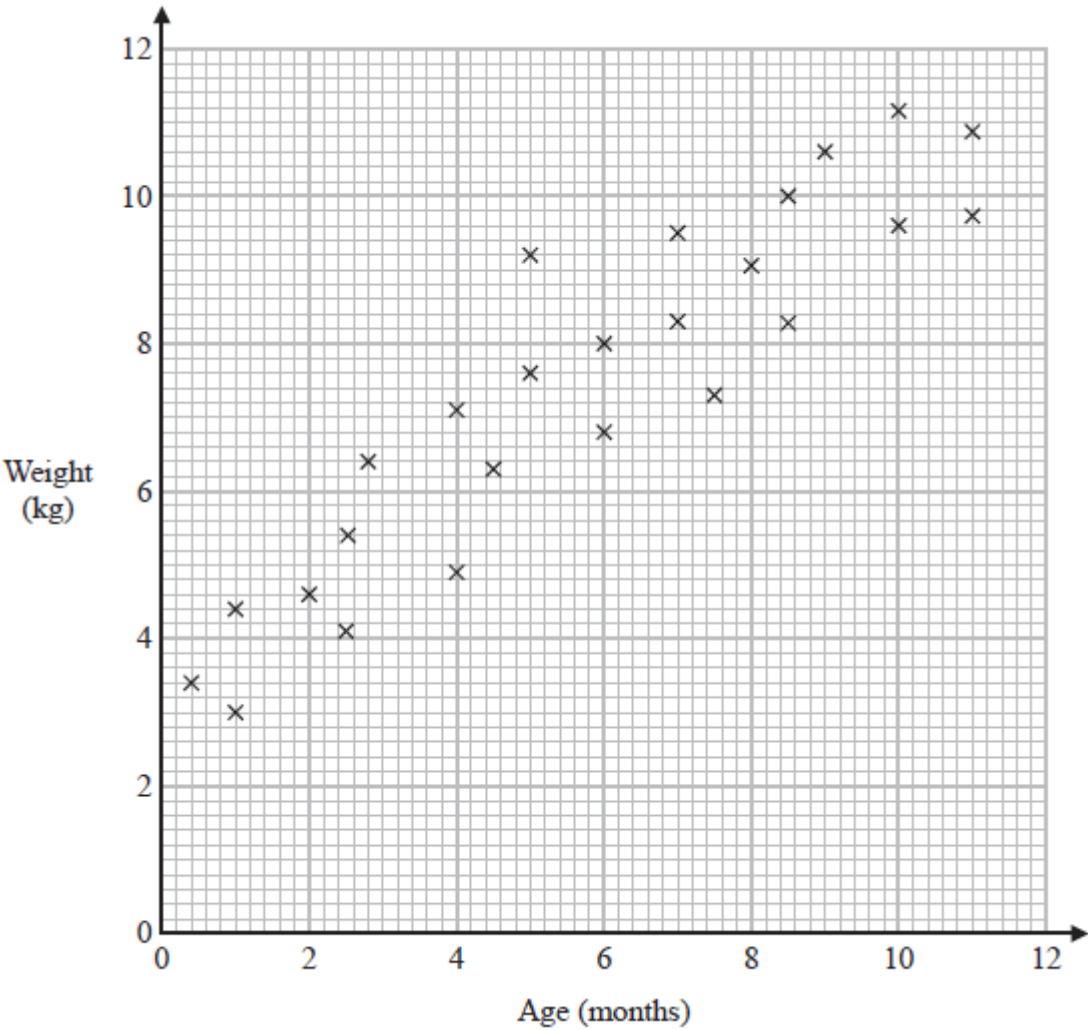
There are 420 different ways to choose one starter, one main course and one dessert.

Work out the value of x .

$x =$

(Total for Question 3 is 2 marks)

*4 The scatter graph shows information about the ages and weights of some babies.



(a) Describe the relationship between the age and the weight of the babies.

.....

.....

.....

(1)

Another baby has a weight of 5.8 kg

(b) Using the scatter graph, find an estimate for the age of this baby.

..... months

(2)

(Total for Question 4 is 3 marks)

***5** Work out $7\frac{3}{8} - 2\frac{1}{2}$

Give your answer as a mixed number.

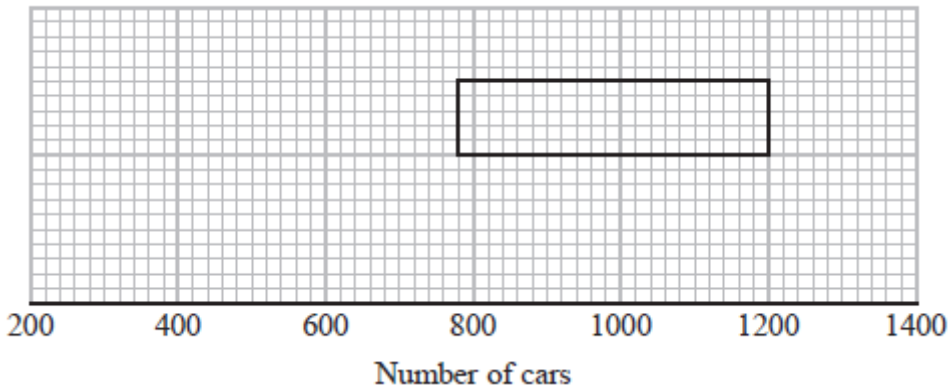
.....
(Total for Question 5 is 3 marks)

***6** Work out 6.3×2.4

.....
(Total for Question 6 is 3 marks)

- 7 Alice recorded the number of cars going into a village on each of 80 days.
The incomplete table and the incomplete box plot give information about her results.

	Number of cars
Least number	300
Lower quartile	
Median	900
Upper quartile	
Range	1000



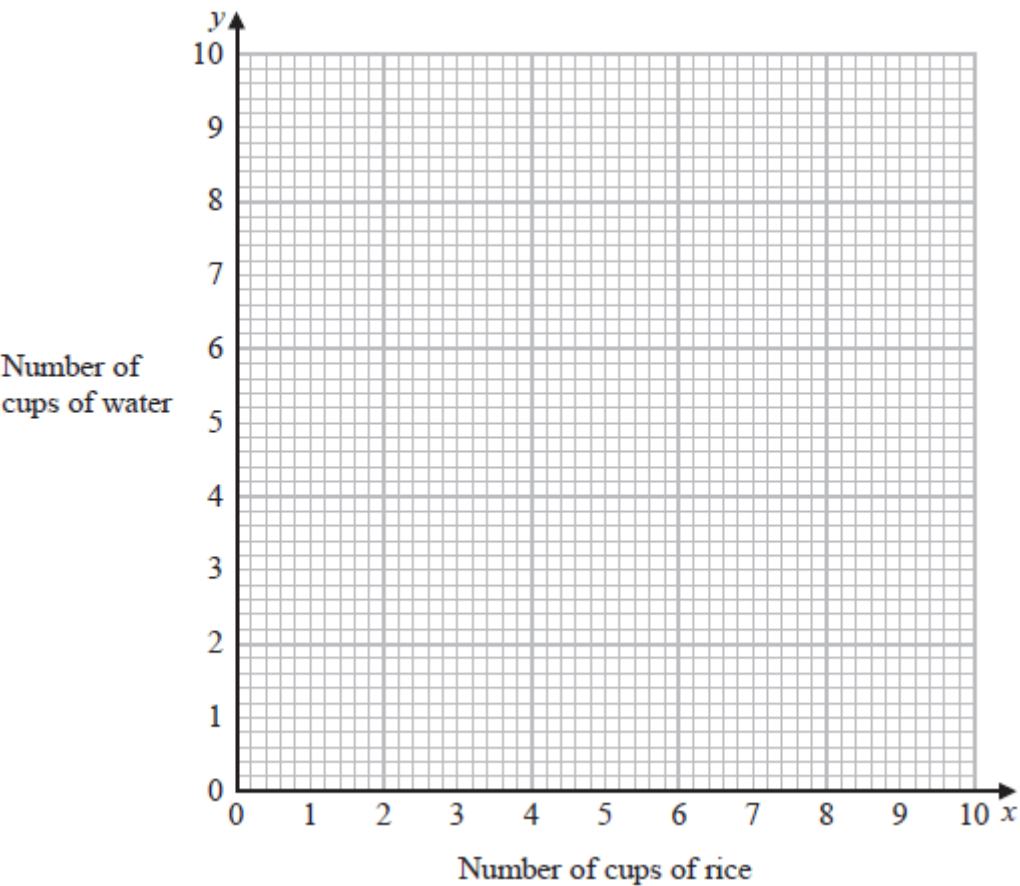
- (i) Use the information in the table to complete the box plot.
- (ii) Use the information in the box plot to complete the table.

(Total for Question 7 is 3 marks)

8 To cook rice

the number of cups of rice (x) : the number of cups of water (y) = 4 : 5

Use this information to draw a graph to show the relationship between the number of cups of rice and the number of cups of water needed to cook rice.



(Total for Question 8 is 2 marks)

***9** Work out $8.46 \div 0.15$

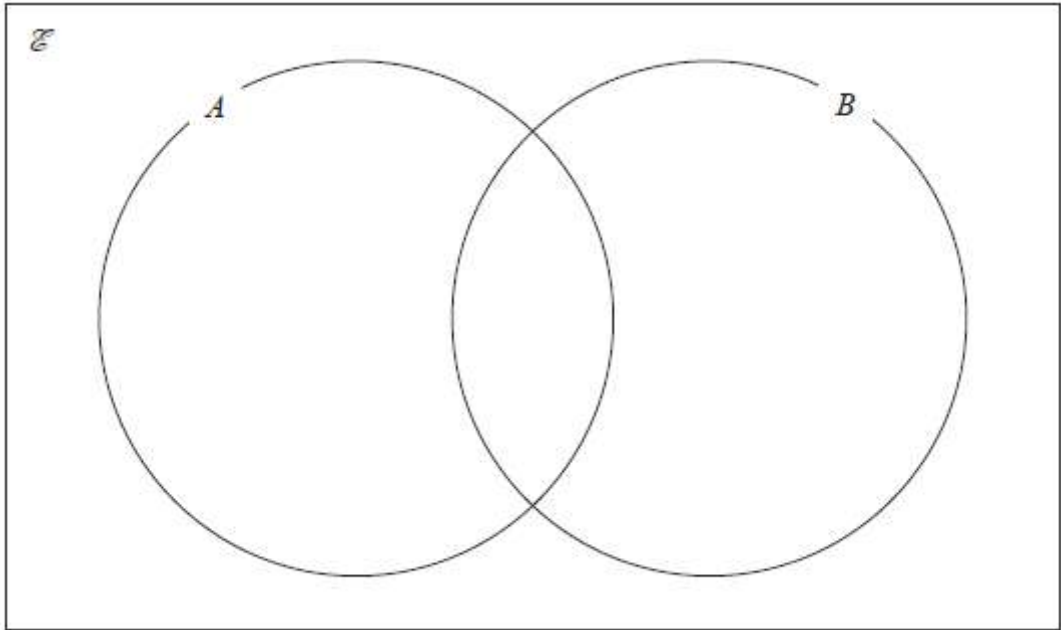
.....
(Total for Question 9 is 3 marks)

***10** $\mathcal{E} = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$

$A = \{\text{odd numbers}\}$

$B = \{\text{square numbers}\}$

Complete the Venn diagram for this information.



((Total for Question 10 is 3 marks))

***11** The price of a holiday increases by 20%
This 20% increase adds £240 to the price of the holiday.

Work out the price of the holiday before the increase.

£.....

((Total for Question 11 is 2 marks))

TOTAL FOR PAPER IS 31 MARKS