



General Certificate of Secondary Education
2009

Mathematics



Module N2 Paper 1
(**Non-calculator**)
Foundation Tier
[GMN21]

MONDAY 18 MAY
1.30 pm – 2.15 pm



StudentBounty.com

71

Candidate Number

TIME

45 minutes.

INSTRUCTIONS TO CANDIDATES

Write your Centre Number and Candidate Number in the spaces provided at the top of this page.
Write your answers in the spaces provided in this question paper.
Answer **all thirteen** questions.
Any working should be clearly shown in the spaces provided since marks may be awarded for partially correct solutions.
You **must not** use a calculator for this paper.

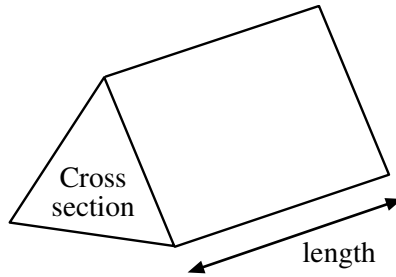
INFORMATION FOR CANDIDATES

The total mark for this paper is 44.
Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each question or part question.
You should have a ruler, compasses, set-square and protractor.
The Formula Sheet is on page 2.

For Examiner's use only	
Question Number	Marks
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
Total Marks	

Formula Sheet

Volume of prism = area of cross section \times length



1 Write down the next two terms in the sequence

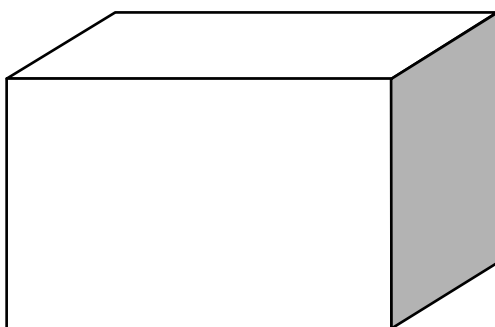
12, 11, 9, 6,,

Answer _____ , _____ [2]

Examiner Only

Marks Remark

2



A cuboid has volume 120 cm^3 .

The length of the cuboid is 8 cm. The breadth is 5 cm.

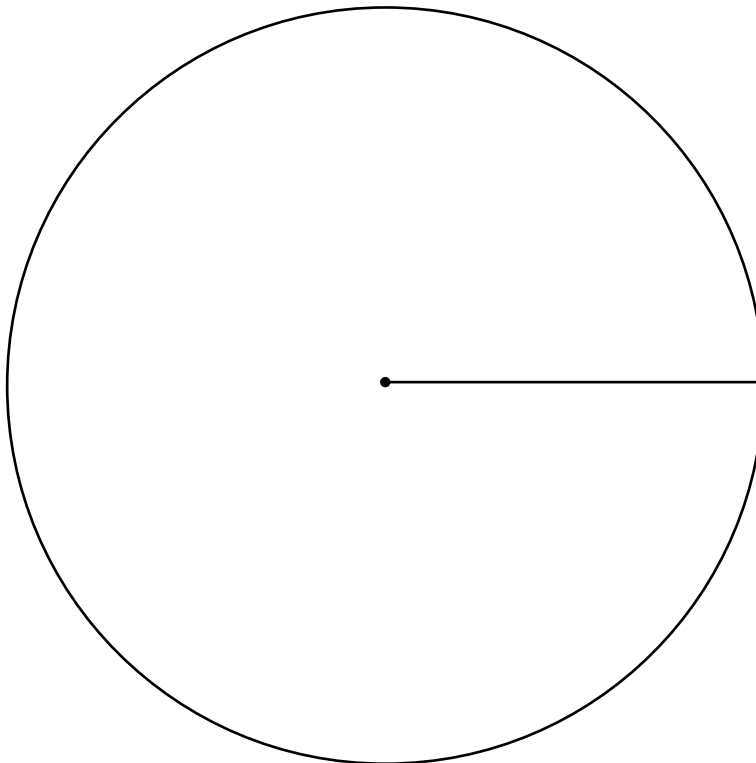
Find the height of the cuboid.

Answer _____ cm [2]

- 3 During a short period the colours of cars passing a school were noted. The results were as follows:

Blue	15
Green	10
White	9
Black	5
Red	21

Draw a pie chart to illustrate this information.



[4]

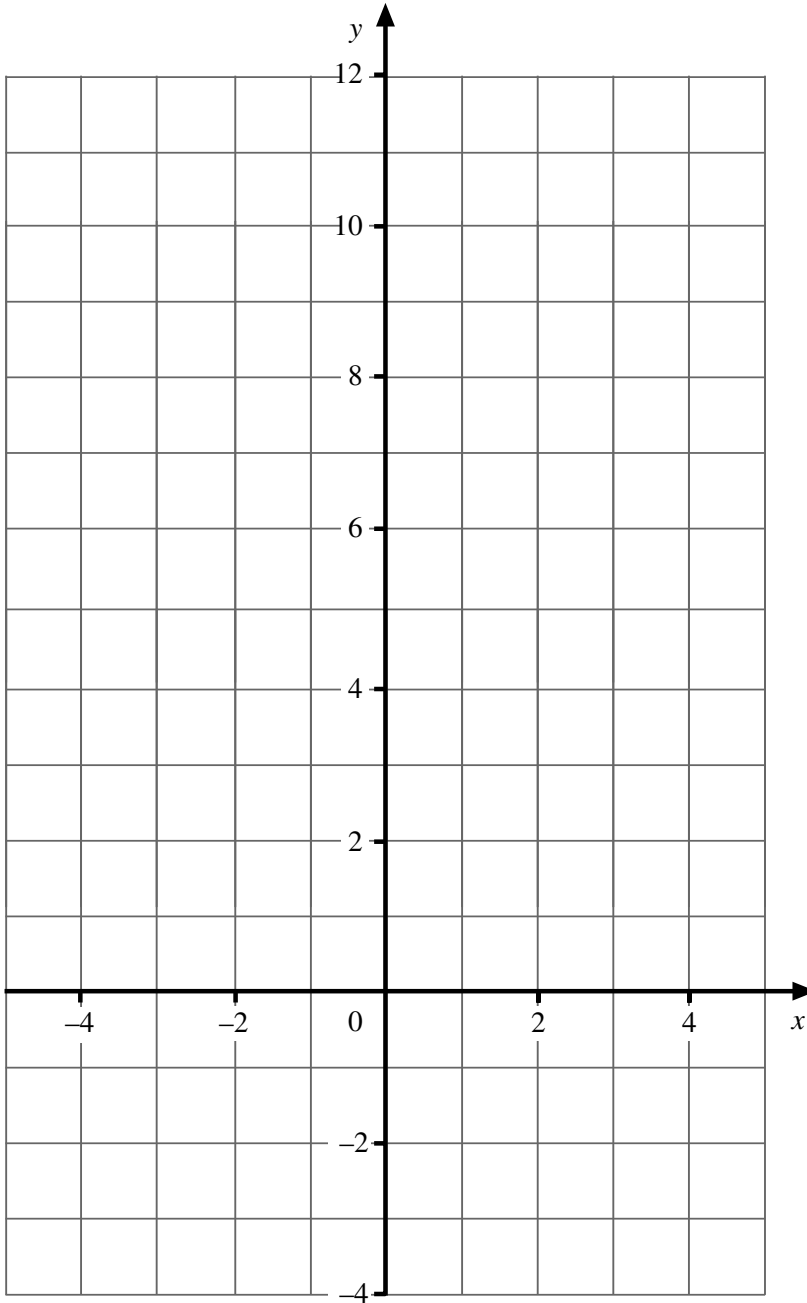
Examiner Only	
Marks	Remark

4 (a) Complete the table for $y = 3x - 1$

x	-1	1	3	4
$y = 3x - 1$		2	8	11

[1]

(b) Hence draw the graph of $y = 3x - 1$

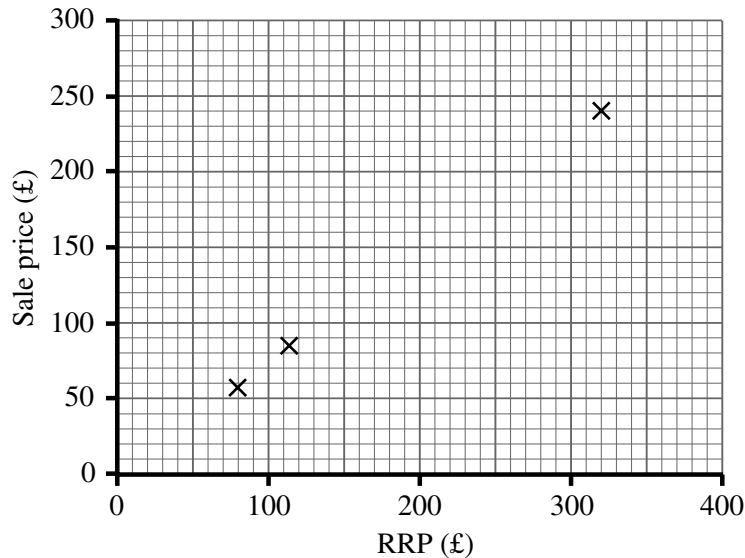


[2]

Examiner Only	
Marks	Remark

- 6 The table shows the RRP (recommended retail price) and the sale price of some products in Jack's Discount Store.

RRP (£)	80	113	140	170	180	210	230	270	300	320
Sale price (£)	58	85	105	130	132	155	178	200	232	240



The data in bold type has already been plotted.

- (a) Complete the scatter graph. [2]

- (b) Draw a line of best fit. [1]

- (c) Estimate the RRP of a product on sale for £150.

Answer £ _____ [1]

- (d) What type of correlation does your graph show?

Answer _____ [1]

Examiner Only	
Marks	Remark

7 (a) Factorise $p^2 + 7p$

Answer _____ [1]

(b) The n th term of a sequence is $n^2 - 3$
Which term of the sequence will equal 78?

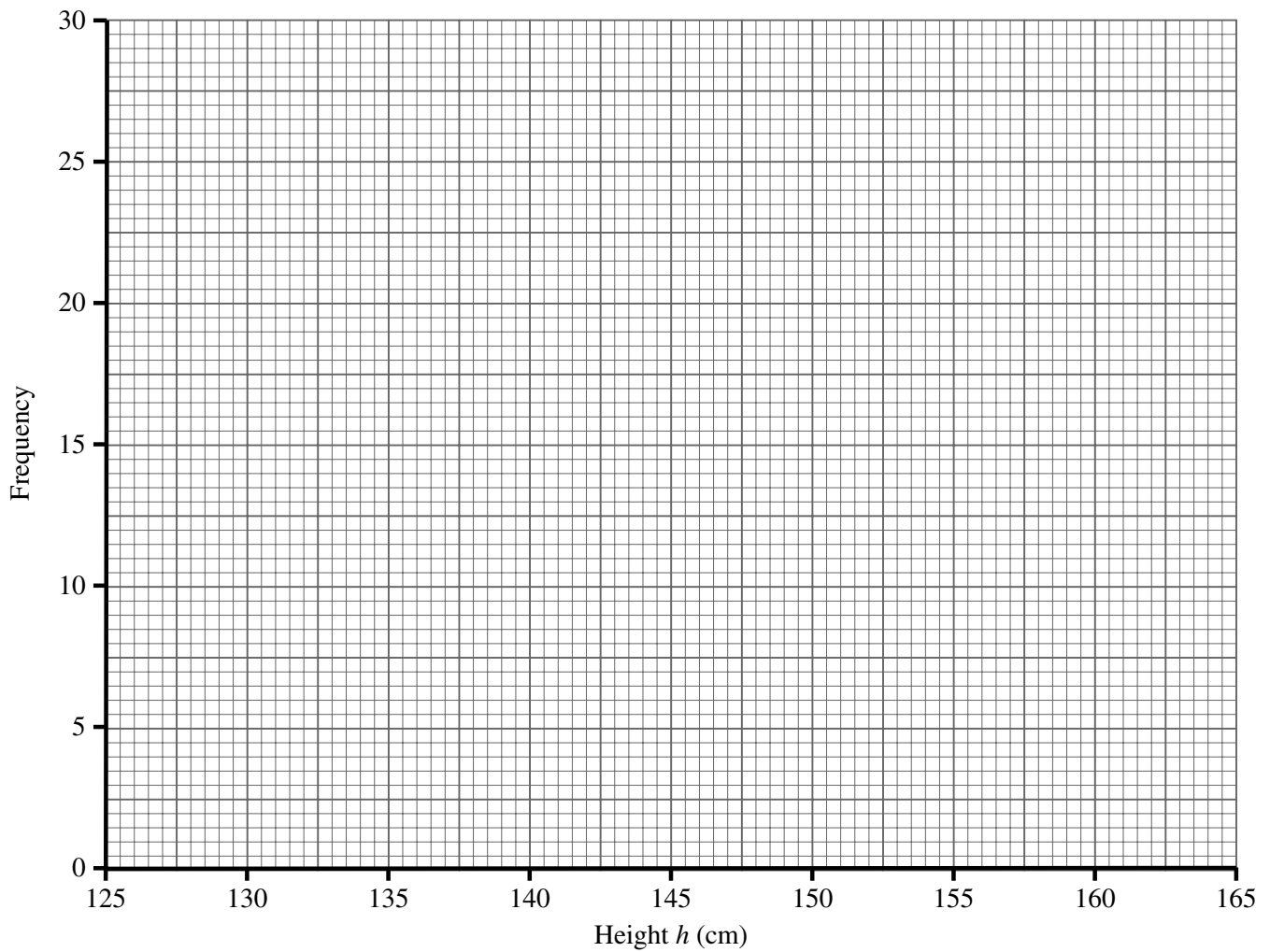
Answer _____ [2]

Examiner Only	
Marks	Remark

10 The heights of 100 students were recorded.

Height, h , in cm	Frequency
$130 \leq h < 135$	15
$135 \leq h < 140$	25
$140 \leq h < 145$	26
$145 \leq h < 150$	21
$150 \leq h < 155$	8
$155 \leq h < 160$	5

Draw a frequency polygon for the data.



[2]

Examiner Only	
Marks	Remark

