Rewarding Learning

Centre Number	
71	

Candidate Number

General Certificate of Secondary Education
January 2010

Mathematics

Module N1 Paper 2
(With calculator)
Foundation Tier

[GMN12]

GMN12

TUESDAY 12 JANUARY

10.30 am – 11.15 am

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 twelve** questions.
Any working should be clearly shown in the spaces provided since marks may be awarded for partially correct solutions.

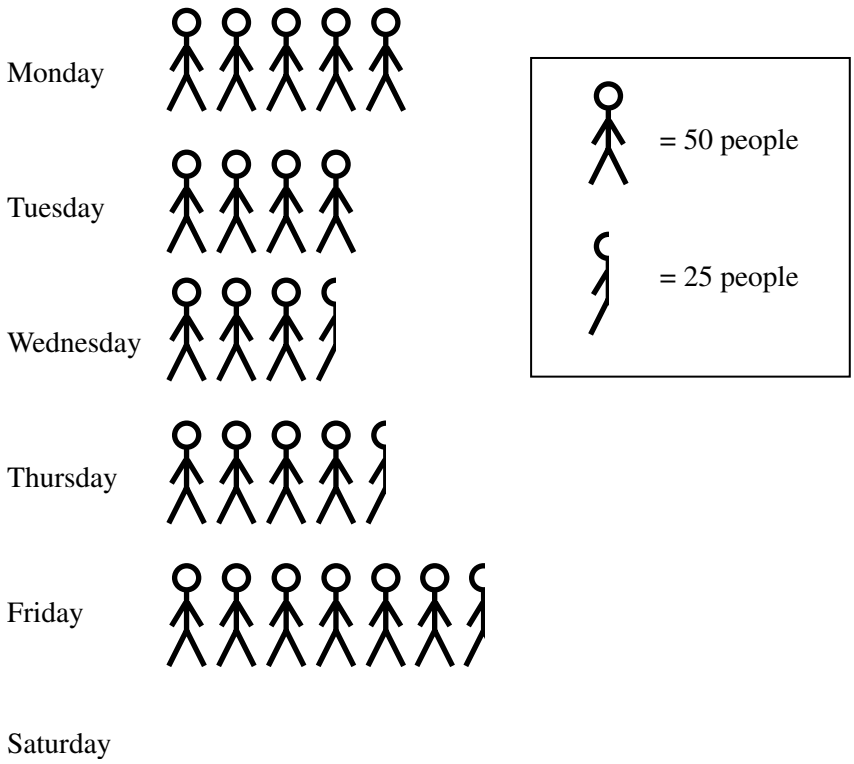
INFORMATION FOR CANDIDATES

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 calculator, ruler, compasses, set-square and protractor.

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

Examiner Only	
Marks	Remark

1 The pictogram illustrates the number of people attending the cinema in a week.



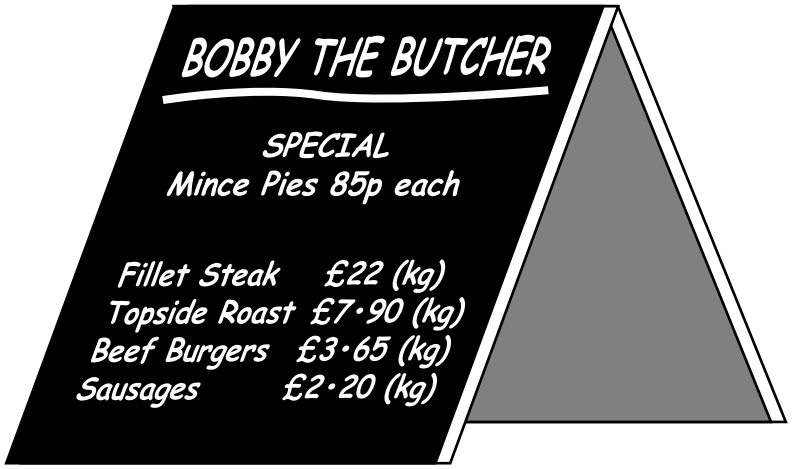
(a) How many people attended the cinema on Wednesday?

Answer _____ [1]

(b) 225 people attended the cinema on Saturday. Complete the pictogram for Saturday. [2]

Examiner Only	
Marks	Remark

2



Complete the bill.

$\frac{1}{4}$ kg Fillet Steak _____

2 kg Sausages _____

4 Mince Pies _____

Total £ _____ [4]

3

11	7	14	36
45	9	3	22

Multiply the second highest number in the table by the second lowest number and divide the answer by 4

Answer _____ [3]

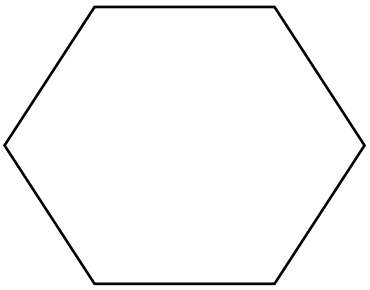
Examiner Only	
Marks	Remark

4 **(a)** Name the shapes drawn.

(i)

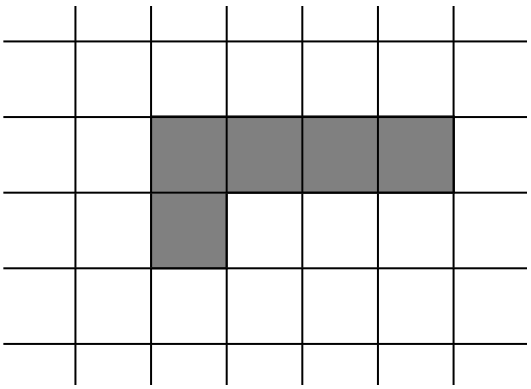
Answer _____ [1]

(ii)



Answer _____ [1]

(b) Work out the perimeter of the following shape drawn on a 1 cm grid.



Answer _____ cm [1]

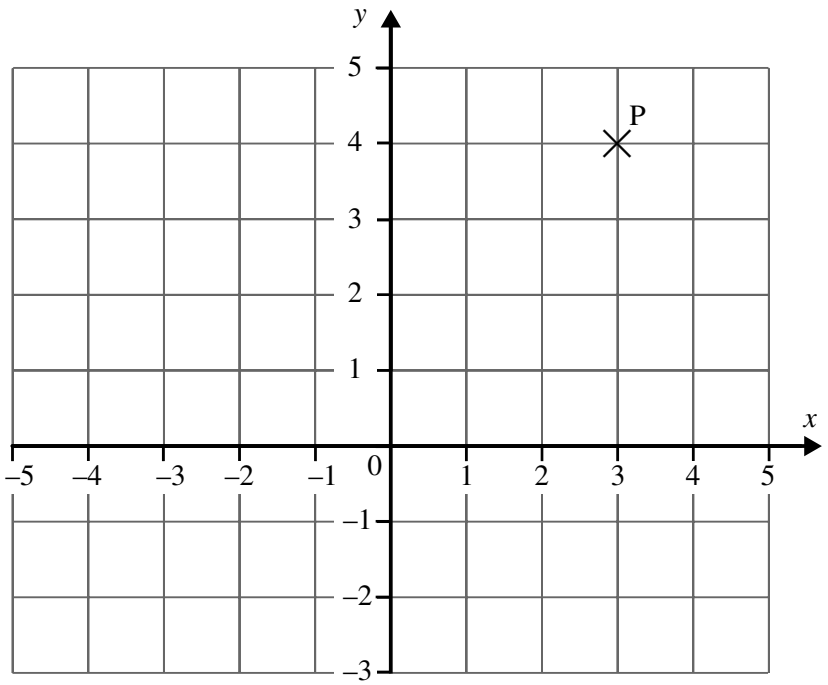
(c) Draw a sketch of a square-based pyramid.

[1]

Examiner Only	
Marks	Remark

5 The grid below represents part of the map of a town.

Examiner Only	
Marks	Remark



(a) The point P represents the location of the Post Office.

Write down the co-ordinates of the point P.

Answer P (_____ , _____) [1]

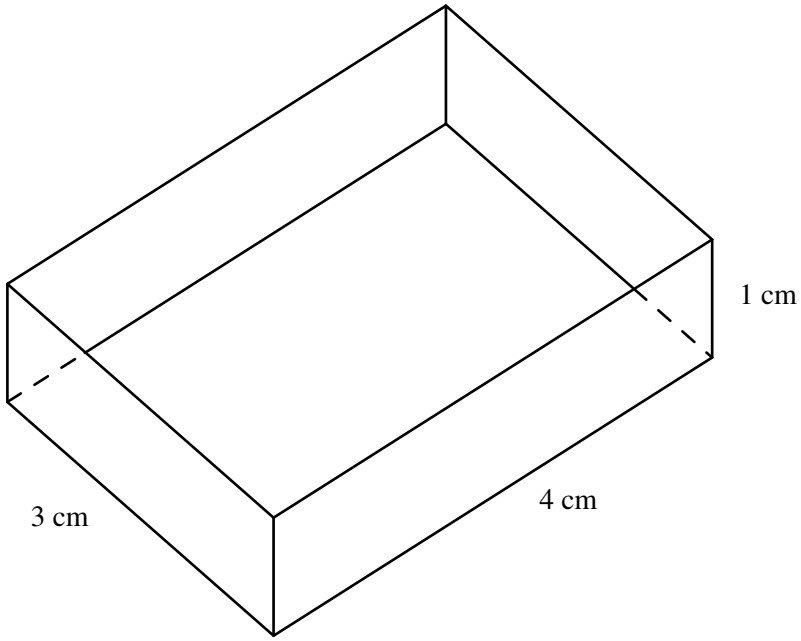
(b) The hospital, H is at (2, 0) and the school, S is at (4, –1).

Mark and label clearly the points H and S on the grid above. [2]

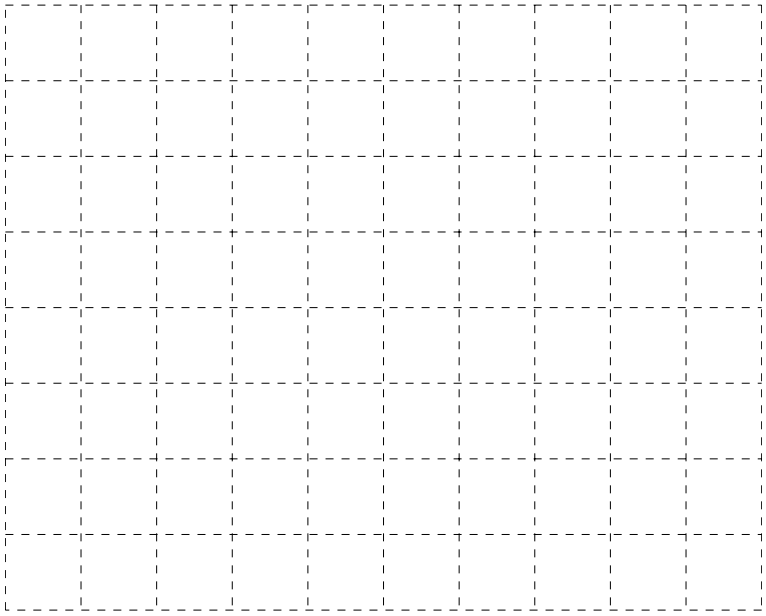
(c) The line $y = 4$ represents the main street in the town.

Draw the line $y = 4$ on the grid above. [1]

6



Draw the net of the open box on the 1 cm grid below. [3]



Examiner Only	
Marks	Remark

Examiner Only	
Marks	Remark

7 **(a)**

Source: www.londoninternationalfilms.com/images/SiteImages/CinemaInside.jpg

There are 480 seats in a cinema. 65% of them are in the stalls section. How many is this?

Answer _____ [2]

(b) Sue has been saving to take some friends to the cinema. If she has £32.40 saved and the tickets cost £5.80 each, how many **friends** can she take?

Answer _____ [3]

Examiner Only	
Marks	Remark

8 The figures give the shoe sizes of 20 pairs of shoes sold in a shop one Saturday afternoon.

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

(a) Calculate the mean of the shoe sizes.

Answer _____ [3]

(b) Write down the median shoe size.

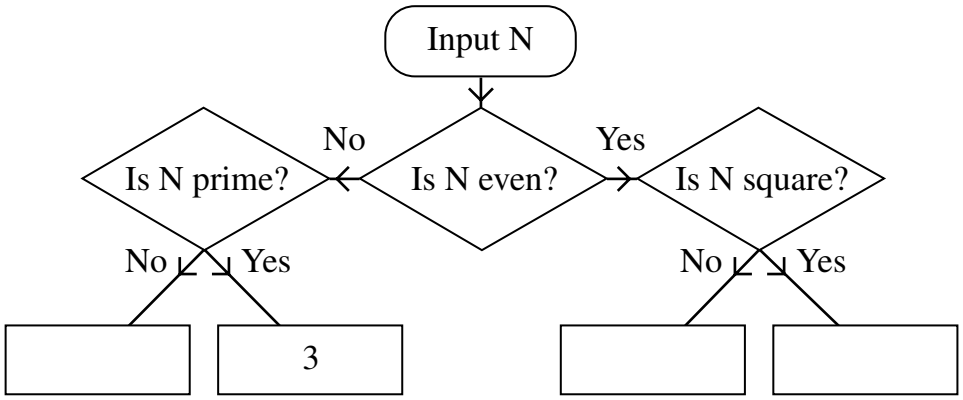
Answer _____ [2]

(c) The shop wishes to place an order for more shoes. Based on Saturday's sales, which average – mean, mode, or median – do you think they should give greatest consideration to when placing the order? Give a reason for your answer.

Answer _____ because _____

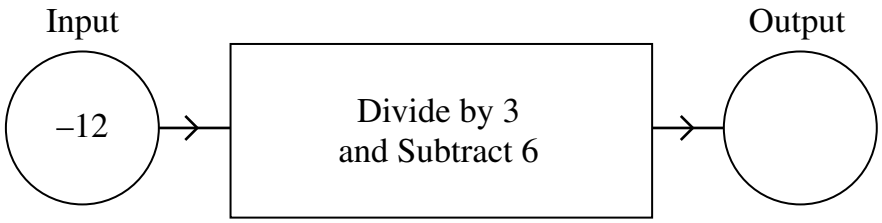
_____ [2]

9



Use the decision tree diagram to sort the integers from 1 to 10
The integer N = 3 has already been done. [2]

10 Complete the output for the function machine below.



[1]

11 **Broadband for speed and savings**

Download speed	15 Mb
Wireless router	One off payment £20
Monthly price	£16 per month for first 6 months £22 per month thereafter

Darragh wants Internet Broadband, together with a wireless router, and signs up for the 15 Mb package.

After a period of time he decides to upgrade to a new package. At this stage he has paid £270 altogether. After how many months did he decide to upgrade?

Answer _____ [4]

Examiner Only

Marks	Remark

12 (a)

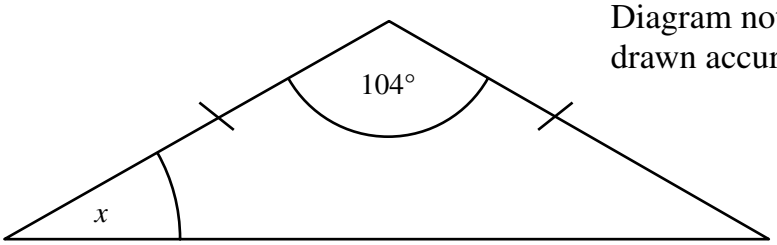


Diagram not drawn accurately

Calculate the angle x in the isosceles triangle.

Answer _____° [2]

(b) Calculate the area of a rectangle measuring 6.8 cm by 2.6 cm.

Answer _____ cm^2 [2]

Examiner Only	
Marks	Remark

THIS IS THE END OF THE QUESTION PAPER