![CCEA logo] Rewarding Learning

General Certificate of Secondary Education

2009

Mathematics

Module N1 Paper 1
(Non-calculator)
Foundation Tier

[GMN11]

GMN11

MONDAY 18 MAY

1.30 pm – 2.15 pm
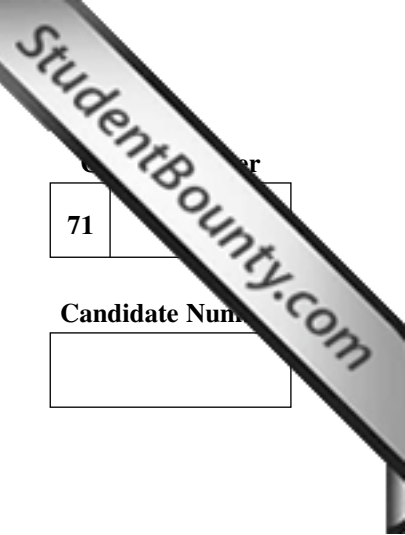
TIME

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 eleven** 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.
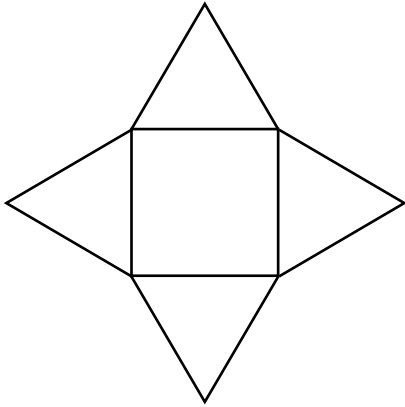You should have a ruler, compasses, set-square and protractor.

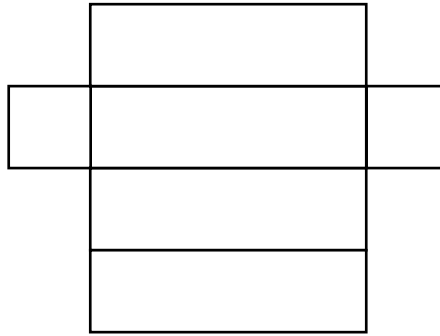| For Examiner's use only	
Question Number	Marks
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
Total Marks	

4556

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1 (a) The nets of two solids are shown below.
Name the solids, choosing from

cylinder   triangular based pyramid   cone   cuboid

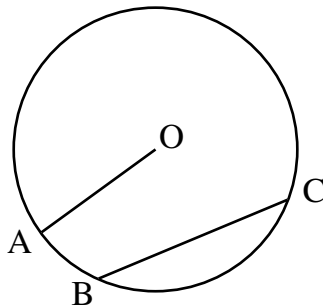**cube   square based pyramid**

Net A

Net B

Answer Net A _____

Answer Net B _____ [2]

(b)

Complete the sentences below, choosing from

diameter   sector   radius   chord   circumference   segment

O is the centre of the circle and A is a point on the _____
of the circle.

The line OA is the _____ of the circle.

The line BC is a _____ of the circle.   [3]

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2 90 pupils were asked which of the following ice-cream flavours they liked best. The first three rows of the pictogram are drawn below.

Ice-cream flavour liked best

Strawberry

Vanilla

Honeycomb

Chocolate

(a) 24 pupils liked Strawberry best.
Complete the key:

= _____ pupils [1]

(b) How many pupils liked Honeycomb best?

Answer _____ [1]

(c) Complete the row of the pictogram for Chocolate. [2]

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3   12   13   14   15   16   17   18

From the list of numbers write down

(a) the square number

Answer _____ [1]

(b) the multiple of 9

Answer _____ [1]

(c) the two numbers which are factors of 36

Answer _____ and _____ [1]

4 Look at the pattern of numbers below.

1
1 + 3
1 + 3 + 5
1 + 3 + 5 + 7

(a) Find the totals for the first 4 lines of this pattern.

Answer _____ , _____ , _____ , _____ [1]

(b) Write down the special name given to these totals.

Answer _____ [1]

5 (a) Work out 500 – 272

Answer _____ [2]

(b) Write 26 million in figures.

Answer _____ [1]

6 Show that the following numbers are in ascending order of size.

$$28\%, \quad \frac{3}{10}, \quad 0.4$$

[3]

[Turn over

7 **(a)** The ages of some footballers are

25   15   27   18   24   17   21   18   18   17

What is the mean age of the footballers?

Answer _____ [3]

(b) The pie chart shows how Jason spent six hours at home one evening.

(i) How much time was spent doing homework?

Answer _____ hours [2]

(ii) Estimate the time spent watching TV.

Answer _____ hours [1]

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(iii) Measure the angle for playing games.

Answer _____° [1]

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8 **(a)** A rectangle has length 6 cm and breadth 2 cm. Calculate its perimeter.

Answer _____ cm [1]

(b) **(i)**

Calculate the volume of the cuboid which has a length 15 cm, breadth 10 cm and height 12 cm.

Answer _____ [3]

(ii) Another 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]

9 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]

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10 (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]

[Turn over
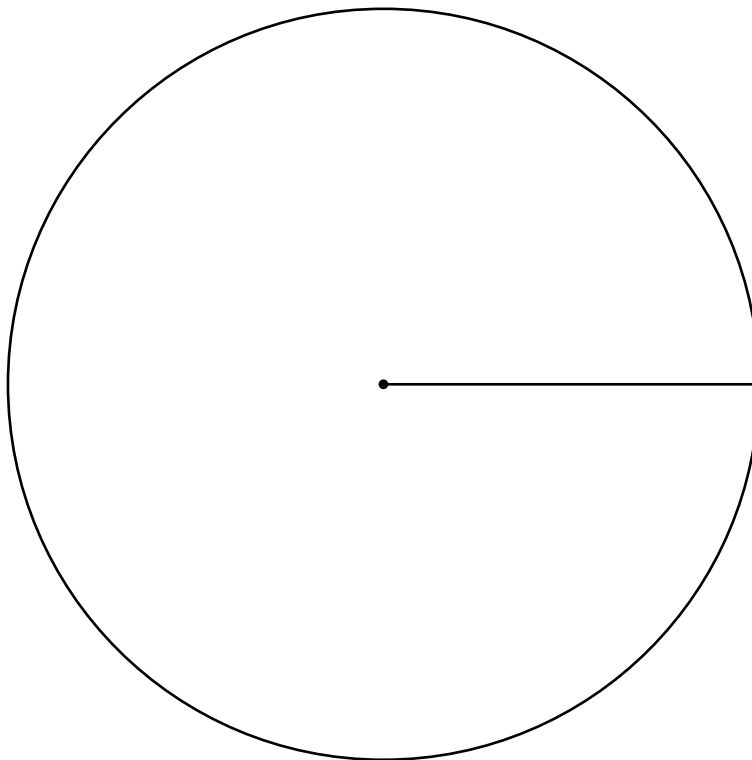
11 (a) Calculate $5^2 \times 2^3$

Answer _____ [2]

(b) Write $\frac{7}{8}$ as a percentage.

Answer _____% [2]

THIS IS THE END OF THE QUESTION PAPER

937-038-1