



Rewarding Learning

General Certificate of Secondary Education

January 2009

Mathematics

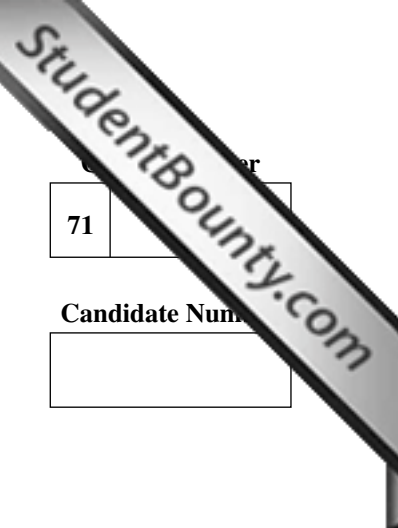
Module N5 Paper 1
(Non-calculator)
Foundation Tier

[GMN51]

WEDNESDAY 14 JANUARY
1.30 pm – 2.30 pm



GMN51



71	
Candidate Number	
<input type="text"/>	

TIME

1 hour.

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.
 You **must not** use a calculator for this paper.

INFORMATION FOR CANDIDATES

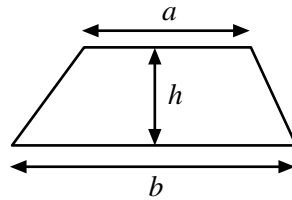
The total mark for this paper is 56.
 Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each question or part question.
 You should have a ruler, compasses, set-square and protractor.
 The Formula Sheet is on page 2.

For Examiner's use only	
Question Number	Marks
1	
2	
3	
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6	
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11	
12	

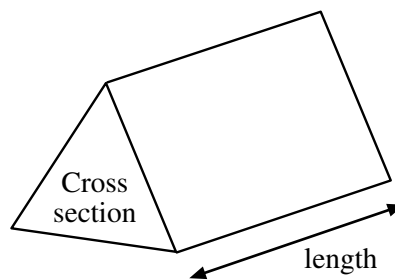
Total Marks	
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Formula Sheet

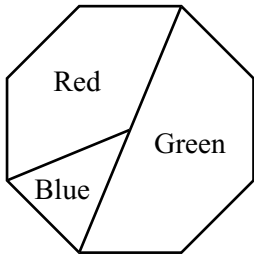
$$\text{Area of trapezium} = \frac{1}{2} (a + b)h$$



$$\text{Volume of prism} = \text{area of cross section} \times \text{length}$$



1



The 8 sided spinner can land on any of three colours red, blue or green.

(a) On which colour is it least likely to land?

Answer _____ [1]

(b) Write down a suitable **word** to describe the chance of the spinner landing on green.

Answer _____ [1]

(c) Write down a suitable **word** to describe the chance of the spinner landing on yellow.

Answer _____ [1]

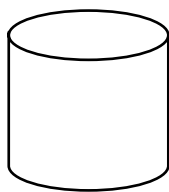
(d) Write down a suitable **word** to describe the chance of the spinner landing on red, blue or green.

Answer _____ [1]

Examiner Only	
Marks	Remark

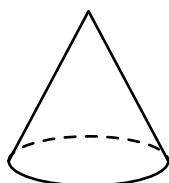
2 Write the correct mathematical name for each of the following solids.

(a)



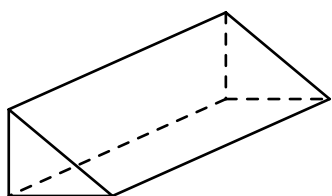
Answer _____ [1]

(b)



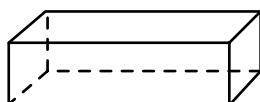
Answer _____ [1]

(c)



Answer _____ [1]

(d)



Answer _____ [1]

(e) Mark **one** right angled corner in each of the solids in (c) and (d). [2]

Examiner Only	
Marks	Remark

- 4 Clara earns £7 per hour for working 30 hours Monday to Friday.
On Saturday she works from 10 am to 3 pm for £10 per hour.
How much is her total pay for the week?

Answer £ _____ [4]

5 (a) **B U S**

From the letters in the word BUS (above) choose

- (i) a letter with one vertical line of symmetry

Answer _____ [1]

- (ii) a letter with one horizontal line of symmetry

Answer _____ [1]

- (iii) a letter with rotational symmetry of order 2

Answer _____ [1]

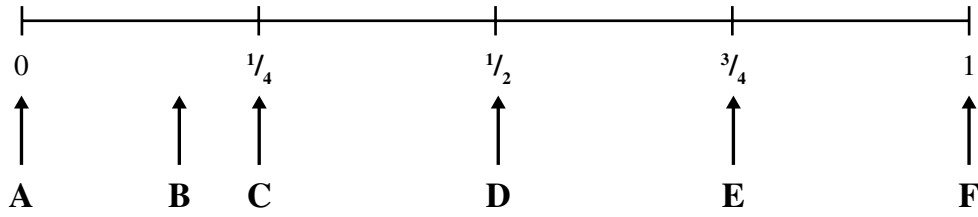
(b) _____ **A T**

Write a letter with exactly two lines of symmetry, in the blank space to create a new word. [1]

Examiner Only	
Marks	Remark

6

Probability Scale



Match each of the events below with a letter from the probability scale above.

A season selected at random is Winter. Answer Letter _____[1]

A triangle has 3 sides. Answer Letter _____[1]

A football captain wins the toss of a coin. Answer Letter _____[1]

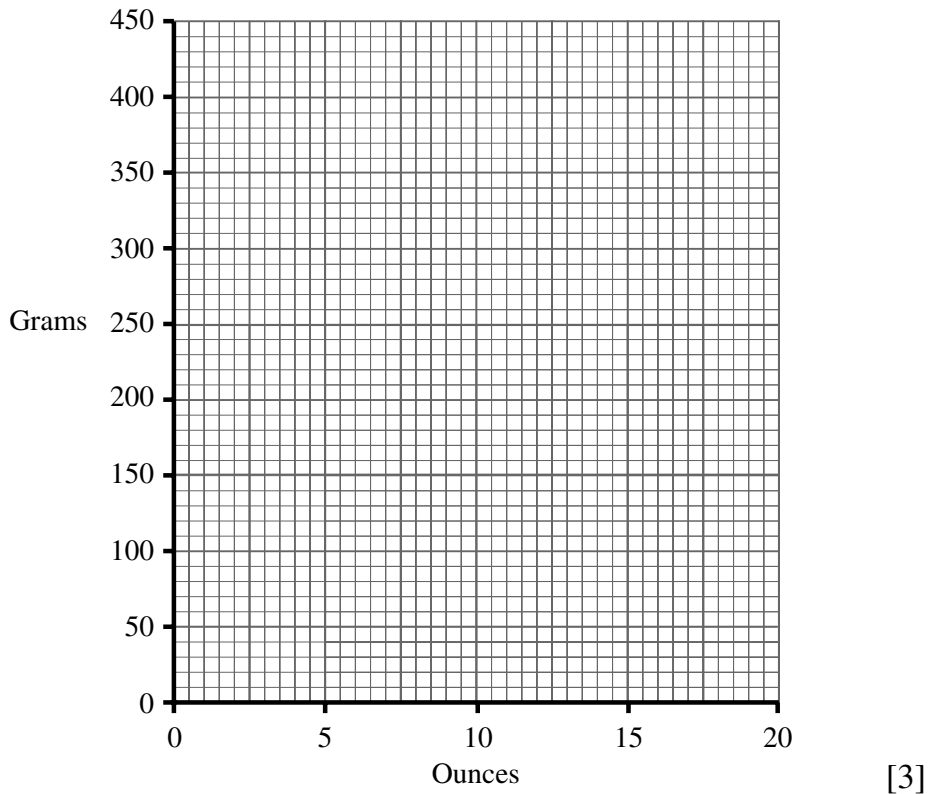
A fair dice is tossed and lands on a 6. Answer Letter _____[1]

Examiner Only	
Marks	Remark

7 Jenna decides to make pancakes but her scales measure in grams and her recipe is in ounces.

(a) Use the values in the table to plot the conversion graph.

Ounces	0	5	10	15
Grams	0	142	284	426



[3]

(b) Use your conversion graph to convert 7 ounces into grams.

Answer _____ grams [1]

(c) The recipe requires 12 ounces of flour. Jenna puts all her flour onto the scales and it reads 350 grams. Does she have enough flour for her recipe? Explain your answer.

Answer _____ because _____

_____ [2]

Examiner Only	
Marks	Remark

9 The timetable gives the times of early morning trains from Norwich to London, Liverpool Street.

NORWICH	Dep	0500	0520	0530	0600	0630	0655	0710	0755	0805	0835	0905
Diss	Dep	0518	....	0547	0618	0647	0713	0728	....	0823	0852	0922
Stowmarket	Dep	0531	....	0558	0630	0658	0725	0740	....	0835	0903	0933
IPSWICH	Arr	0541	0553	0610	0641	0709	0736	0751	0828	0846	0913	0944
	Dep	0543	0553	0612	0642	0710	0737	0752	0830	0847	0915	0945
Manningtree	Dep	0553	....	0620	0652	0721	....	0802	....	....	0925	....
COLCHESTER	Dep	0604	0610	0632	0704	0732	....	0812	....	0906	0935	1003
Chelmsford	Dep	....	....	....	....	....	....	....	....	....	....	1020
LONDON LIVERPOOL STREET	Arr	0653	0700	0721	0756	0826	0848	0903	0933	0955	1025	1054

Jake wishes to travel from **Ipswich** to London, Liverpool Street station. He arrives at **Ipswich** station at 0745 and catches the next train to London, Liverpool Street.
How long is his train journey?

Answer _____ hr _____ mins [3]

Examiner Only	
Marks	Remark

10 Some of the ingredients required to make 30 chocolate muffins are listed below.

- 600 g plain flour
- 540 g caster sugar
- 300 g chocolate chips
- 24 fl oz milk
- 6 medium eggs

Calculate the amounts of ingredients required to make 20 chocolate muffins.

_____ g plain flour

_____ g caster sugar

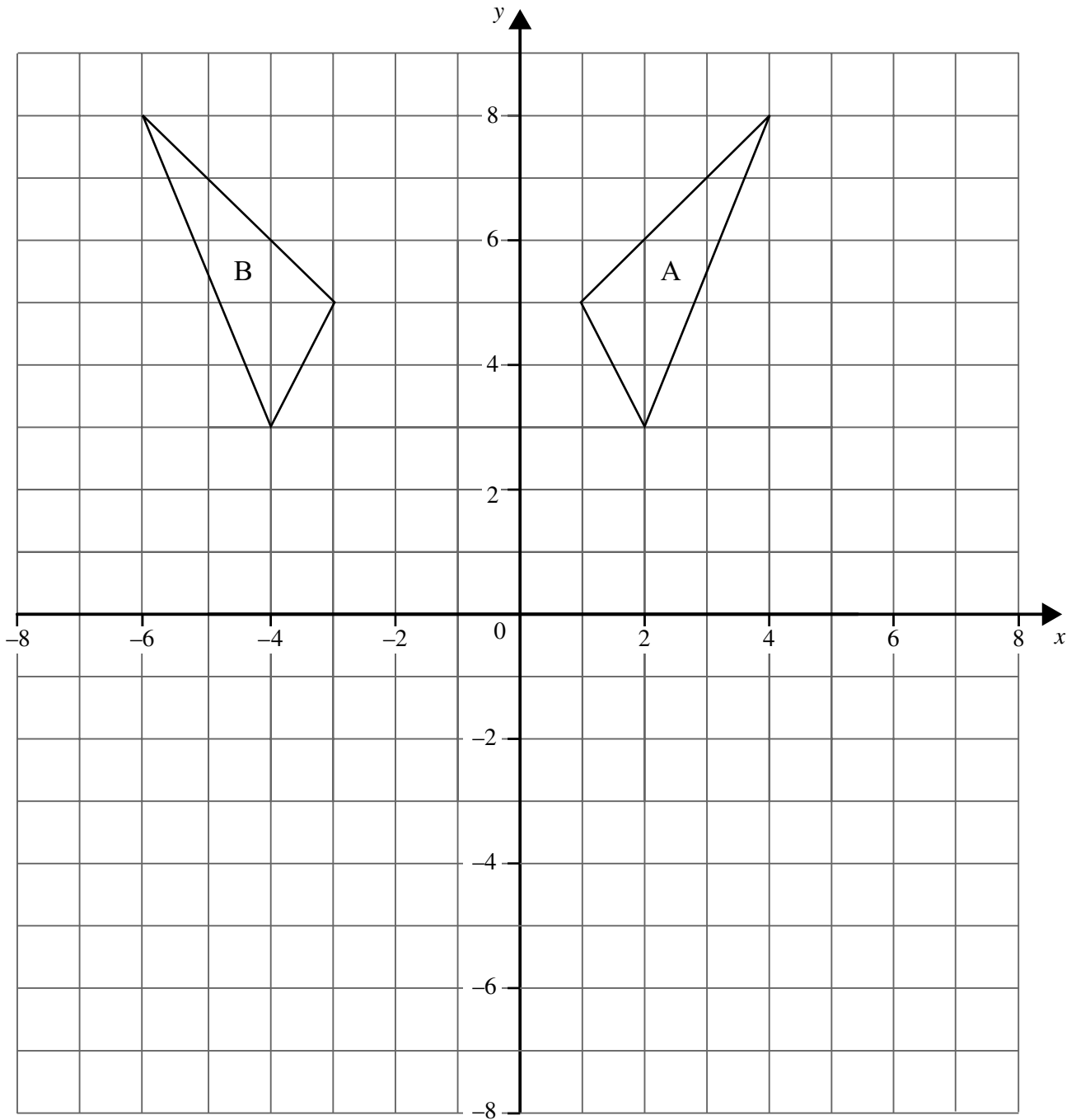
_____ g chocolate chips

_____ fl oz milk

_____ medium eggs

[3]

Examiner Only	
Marks	Remark



(a) Describe fully the **single** transformation which maps triangle A to triangle B.

_____ [2]

Examiner Only	
Marks	Remark

