

Annual Examinations for Secondary Schools 2014

FORM 1

MATHEMATICS

MARKING SCHEME

Notes for Marking of Scripts

Types of Marks

- **M**(ethod) marks are awarded for knowing a correct method of solution and attempting to apply it. Method marks cannot be lost for arithmetic mistakes. They can only be awarded if the method used would have led to the correct answer had not an arithmetic mistake been made. In general a correct method is implied by a correct answer and therefore **when a correct answer is given and no work is shown, no method marks are lost.**
- **A**(ccuracy) marks are given for correct answer only (c.a.o.) Incorrect answers, even though nearly correct, score no marks. Accuracy marks are also awarded for incorrect answers which are correctly followed through (f.t.) from an incorrect previous answer, **provided that f.t. is indicated in the marking scheme.** No method (M) or accuracy (A) marks are awarded when a wrong method leads to a correct answer.
- **B** marks are accuracy marks awarded for specific results or statements independent of the method used.

Misreading

M marks can still be earned (unless that part of the question is trivialized) but the final A marks are lost.

Crossed out working

An answer or working that is crossed out and not replaced is marked as if it was not crossed out. If the answer or working is replaced, then the crossed out answer or working is ignored and should not be considered for marking.

Units

In general, missing or inaccurate units are not penalised unless otherwise indicated in the marking scheme.

Other

- Incorrect working or statement following a correct answer is ignored.
- Marks are not sub-divisible; no half marks may be awarded.
- Other abbreviations used:
 - o.e. (or equivalent)
 - e.e.o.o. (each error or omission)
- Markers are advised to indicate the M, A or B marks awarded in the body of the script and then write their total in the margin. The total mark for each question should be written in the table included at the top of page 1 of the main paper. This measure facilitates the moderation of papers.

Non Calculator Paper

No.	Answers	Marks	Level	Total
1.	a) 58.9	B1	5	3
	b) 79 – 40 39	M1 A1	5/6	
2.	a) 11 + 9 + 15 + 13 48 cans	M1 A1	6	4
	b) 48 ÷ 4 12 cans	M1 A1 (f.t.)	6	
3.	a) Drawing of line 7.5 cm long (± 0.2 cm) correct	B1	5	2
	b) iii) 125°	B1	7	
4.	a) 3.3 kg	B1	6	3
	b) 3.3 × 1000 (seen or implied) 3300 g	M1 A1 (f.t.)	6	
5.	a) – 1 + 3 + 3 = 5	M1 A1	5	4
	b) 1 + 3 – 2 = 2 o.e.	M1(one answer correct) A1(both answers correct)	5	
6.	a) 35 g	B1	5	5
	b) $\frac{1}{5} \times 100$ o.e. = 20 g	M1 A1	6	
	c) 35 + 20 = 55 g seen or implied 100 – 55 = 45 g	M1 A1 (f.t.)	6	
7.	a) 53 and 9 <i>or</i> 59 and 3	M1 A1	5	4
	b) 8, 7	B1 B1	6	
TOTAL : 25 MARKS				

Main Paper

No.	Answers	Marks	Level	Total
1.	a) 7 hundred o.e.	B1	6	5
	b) i) 41 ii) 8.0 or 8	B1 B1	6	
	c) i) 90 ii) 400	B1 B1	5/6	
2.	a) i) 13 ii) Correct marking of arrow at -6	B1 B1	6	7
	b) i) 29 ii) 25 iii) 12	B1 B1 B1	5/6	
	c) 29, 12, 7, 0, -5	B1 for correct smallest number B1 if also all other numbers correct	5/6	
3.	a) Valid attempt at drawing an angle of 65° Correct drawing of angle of $65^\circ (\pm 2^\circ)$	M1 A1	6	4
	b) i) 180° ii) 2	B1 B1	6	
4.	b) cube	B1	5	3
	c) breadth	B1	6	
	d) equilateral triangle	B1	5	
5.	a) €3.50, €2	B1 B1	6	5
	b) $\text{€}3.50 \times 7 = \text{€}24.50$ $\text{€}24.50 + \text{€}2 = \text{€}26.50$	M1 M1 A1	6	
6.	a) Valid attempt at finding the perimeter of shape E 16 cm	M1 A1	6	4
	b) 13 cm^3	M1 A1	5	

7	a)	<table border="1"> <tr> <td></td> <td>Quadrilateral</td> <td>Not a Quadrilateral</td> </tr> <tr> <td>All sides are equal</td> <td>B</td> <td>C</td> </tr> <tr> <td>Not all sides are equal</td> <td></td> <td>D</td> </tr> </table>		Quadrilateral	Not a Quadrilateral	All sides are equal	B	C	Not all sides are equal		D	B3 (-1e.e.o.o.)	7	
		Quadrilateral	Not a Quadrilateral											
All sides are equal	B	C												
Not all sides are equal		D												
	b)	Valid attempt at finding the area of the shapes C	M1 A1	6	5									
8.	a)	i) likely ii) impossible	B1 B1	6										
	b)	Sandro is correct <i>Only 4 even numbers on the spinner or any other valid reason</i>	B1 B1	6	4									
9.	a)	$2 \times 1000 = 2000$ ml seen or implied $250 + 250 + 450 = 950$ ml $2000 - 950 = 1050$ ml	M1 M1 A1	6										
	b)	i) 6.6 cm (± 0.2 cm) ii) $6.6 \times 5 = 33$ m (± 1 m)	M1 M1 A1 (f.t.)	6 7	6									
10.	a)	A = Cuboid, B = Pyramid, C = Cube	B3 (-1 e.e.o.o.)	5/7										
	b)	i) True ii) True iii) False	B1 B1 B1											
	c)	A or Cuboid	B1	6	7									
11.	a)	Correct drawing of bar line graph	B1	5										
	b)	Monday, Tuesday	B1 B1	5										
	c)	8	B1	5										
	d)	$\frac{7+8+6+5+5+4+6}{7} = \frac{41}{7}$ $= 5.85714\dots$ $= 6$	M1 M1 A1	6/7	7									

12.	a)	Correct completion of pictogram	B1	6	6
	b)	$4 + 9 + 5 + 4 + 3 = 25$ students	M1 A1	6	
	c)	Disneyland Paris	B1	5	
	d)	$\frac{5}{25} = \frac{1}{5}$	M1 A1	5/6	
13.	a)	$2.05 + 1.00 = 3.05$	M1 A1	6	6
	b)	Half past one	B2 (-1e.e.o.o.)	6	
	c)	i) 13:20 ii) June	B1 B1	7	
14.	a)	i) $12 \times 7 = 84$	M1 A1	7	6
		ii) multiply by 7	B1	6	
	b)	i) Correct plotting of point B ii) Joining of points A, B and C to form a line iii) $(-1, 3)$ or $(1, 1)$ or $(2, 0)$ or $(3, -1)$ or other valid points	B1 B1 B1	7 5 6	
TOTAL: 75 MARKS					

Maths

Levels 5-6-7

Marking Scheme

Page 3 Question 6a

shape E should read shape X