



Annual Examinations for Middle Schools 2023

YEAR 7

MATHEMATICS

MARKING SCHEME

Notes for Marking of Scripts

Types of Marks

Method 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. Unless otherwise stated, any valid method not specified in the marking scheme is to be accepted and marked accordingly.

There are two types of Method marks: **M** marks and **(M)** marks.

- **M marks** are only awarded if method is seen.
- **(M) marks** are awarded even when a correct answer is given and no work is shown.

There are two types of Accuracy marks: **A** marks and **B** marks.

- **A** marks are accuracy marks 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 marks **M/(M)** or Accuracy marks **A** are awarded when a wrong method leads to a correct answer.
 - * When a question is assigned **M** and **A** marks and students present a correct answer without any working, only **A** marks are awarded.
- **B** marks are accuracy marks awarded for specific results or statements independent of the method used.

Misreading

Method marks can still be earned (unless that part of the question is trivialised) but the final Accuracy marks are lost.

Crossed out working

An answer or working that is crossed out and not replaced is marked as if it were 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

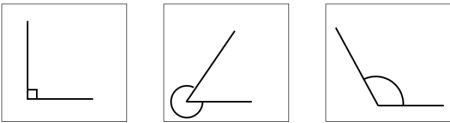
- Incorrect working or statement following a correct answer is ignored.
- Marks are not sub-divisible; no half marks may be awarded.
- Other abbreviations used:
 - o.e. (or equivalent)
 - e.e.o.o. (each error or omission)
- Markers are advised to indicate the **M**, **(M)**, **A** or **B** marks awarded 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.

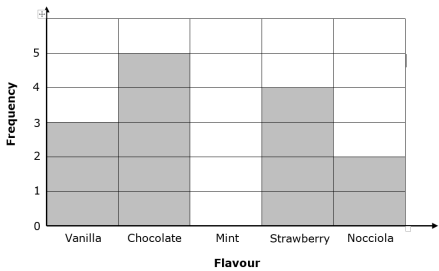
Non-Calculator Paper – 25 marks

Que.		Requirements	Mark		Additional Guidance
1	a)	238	B1	2	
	b)	Two hundred and thirty-eight	B1 ft		ft from a)
2	a)	294	M1 A1	8	Valid attempt to subtract
	b)	777	M1 A1		Valid attempt to add
	c)	61.2	M1 A1		Valid attempt to multiply
	d)	12.3	M1 A1		Valid attempt to divide
3		25% = $\frac{1}{4}$ $128 \div 4 = 32$	(M)1 A1	2	
4	a)	$35 \div 5 = 7$ $7 \times 2 = 14$	M1 A1	5	
	b)	$\frac{3}{5}$	B1		
	c)	A = 5.4 B = 6.7	B1 B1		
5	a)	28 24	B1 B1	4	
	b)	120 1200	B1 B1		
6	a)	equilateral	B1	4	
	b)	3 lines of symmetry correctly drawn	B1		
	c)	$180^\circ \div 3$ $= 60^\circ$	(M)1 A1		

Main Paper – 75 marks

Que.		Requirements	Mark		Additional Guidance
1	a)	200 or two hundred 2 or two $\frac{2}{10}$ or two tenths	B1 B1 B1	7	
	b)	$> ; = ; >$	B3		
	c)	900	B1		
2	a)	i) 98 ii) $70 \div 5 = 14$ $14 + 19 = 33$	B1 (M)1 A1	8	
	b)	i) 10 ii) $3 \times 5 = 15$ $15 - 9 = 6$ iii) $18 - 10$ 8	B1 (M)1 A1 (M)1 A1		

3	a)	evens	B1	4	
	b)	impossible	B1		
	c)	unlikely	B1		
	d)	certain	B1		
4	a)	$30 \div 7$ $= 4 \text{ r } 2$ 4 cupcakes each	M1 A1	4	
	b)	$30 - 28$ 2	(M)1 A1		
5	a)	Attempt to draw an acute angle Accurate angle	M1 A1	6	($\pm 2^\circ$)
	b)	acute	B1		
	c)		B3		B1 each Angle must be marked
6	a)	$\text{€}0.70 \times 2$ $= \text{€}1.40$	(M)1 A1	8	
	b)	$\text{€}0.65 \times 3$ $= \text{€}1.95$	(M)1 A1		
	c)	$\text{€}1.95 + \text{€}2.30 + \text{€}1.15 + \text{€}1.40$ $= \text{€}6.80$	M1 A1 ft		ft from a) and b)
	d)	$\text{€}10 - \text{€}6.80$ $= \text{€}3.20$	(M)1 A1 ft		ft from c)
7	a)	30 minutes	B1	5	
	b)	twenty-five minutes past six in the morning	B1		
	c)	i) 22 days ii) 5 Mondays iii) Saturday	B1 B1 B1		
8	a)	6 faces, 8 vertices	B1 B1	3	
	b)	6 cm^3	B1		
9	a)	8×5 $= 40 \text{ cm}^2$	(M)1 A1	7	
	b)	20 cm by 2 cm OR 10 cm by 4 cm OR 40 cm by 1 cm	B1 B1ft		Accept swapped values of length and breadth ft from a)
	c)	Per of A = $8 + 5 + 8 + 5 = 26 \text{ cm}$ Per of B = according to values chosen in part (b) Rectangle A	M1 M1 A1		

10	a)	Circle correctly drawn at (B, 1)	B1	6	
	b)	(F, 3)	B1		
	c)	(C, 5)	B1		
	d)	i) Attempt to move diamond to the right and/or down Correct new position drawn ii) (H, 2)	M1 A1 B1		
11	a)	Vanilla = 3 Chocolate = 5 Strawberry = 4 Nocciola = 2	B3	11	-1 e.e.o.o.
	b)	16 ice creams	B1		
	c)		B4 ft		ft from a)
	d)	Strawberry	B1 ft		ft from a)
	e)	$€2.70 \times 16$ $= €43.20$	(M)1 A1 ft		ft from b)
12	a)	Correct plotting of the points	B4	6	-1 e.e.o.o
	b)	Pentagon	B1		
	c)	an irregular	B1		