



Annual Examinations for Middle Schools 2022

YEAR 7	MATHEMATICS	MARKING SCHEME
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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.

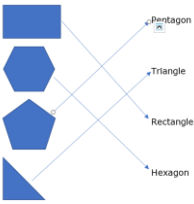
Other

- 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

Que.		Requirements	Mark		Additional Guidance
1		= < >	B1 B1 B1	3	
2	a	Any two even numbers that add up to 20	(M)1 A1	5	
	b	863	B1		
	c	$60 \div 2 = 30$ min	(M)1 A1		
3	a	320	B1	4	
	b	800	B1		
	c	74	B1		
	d	54	B1		
4	a	i) $8 - 3 = 5$	(M)1 A1	8	
		ii) $8 + 2 = 10$	(M)1 A1		
		iii) $24 + 14 = 38$	M1 A1		
	b	15 , 7	B1 B1		
5	a	6	B1	5	
	b	$8 + 10 + 6 + 4 = 28$	M1 A1		
	c	$10 - 4 = 6$	M1 A1		
TOTAL NON-CALCULATOR PAPER: 25 MARKS					

Main Paper

Que.		Requirements	Mark		Additional Guidance
1	a	2.8 kg	B1	4	
	b	Arrow correctly drawn.	B1		
	c	2.0 kg , 2.2 kg	B1 B1		Accept 2.0 and 2.2
2			B4	4	
3	a	6 , 12 , 8	B1 B1 B1	4	
	b	7	B1		

4	a	i) any two sectors shaded	B2	6	
		ii) any four small squares shaded	B2		
	b	$\frac{75}{100} \times 80 = \text{€}60$	M1 A1		
5		<p>You get a multiple of 5.</p> <p>You get a whole number.</p> <p>You get an even number.</p> <p>You get a number less than 11.</p> <div style="display: flex; flex-direction: column; align-items: flex-end;"> <div>Certain</div> <div>Impossible</div> <div>Evens</div> <div>Unlikely</div> </div>	B4	4	
6	a	i) ii)	B1 B2	6	
	b	$10 \times 4 = 40 \text{ cm}$	M2 A1		M1 for 10 M1 for multiplication by 4
7	a	279 , 290 , 729 , 792 , 927	M1 A1	6	
	b	i) $\frac{1}{2}$, 0.5	B1 B1		
		ii) $\frac{5}{9}$	(M)1 A1		
8	a	i) Correct drawing of an angle of 75° ii) Acute	(M)1 A1 B1	8	$\pm 1^\circ$
	b	i) Isosceles ii) 52° iii) 180° iv) $180^\circ - 52^\circ - 52^\circ = 76^\circ$	B1 B1 B1 M1 A1		

9	a	<table><tr><th>Type</th><th>Frequency</th></tr><tr><td>Chicken</td><td>7</td></tr><tr><td>Tuna</td><td>4</td></tr><tr><td>Salmon</td><td>5</td></tr><tr><td>Cheese</td><td>3</td></tr><tr><td>Tofu</td><td>2</td></tr></table>	Type	Frequency	Chicken	7	Tuna	4	Salmon	5	Cheese	3	Tofu	2	B3	11	-1e.e.o.o
		Type	Frequency														
		Chicken	7														
		Tuna	4														
		Salmon	5														
Cheese	3																
Tofu	2																
b	7 + 4 + 5 + 3 + 2 = 21	(M)1 A1f.t															
c	Chicken	B1															
d	$\frac{3}{21} = \frac{1}{7}$	M1 A1															
e	€8.75 × 2 = €17.50 €17.50 + €5.95 = €23.45	M1 M1 A1ft	M1 for multiplying by 2 M1 for addition														
10	a	2 × 12 Rectangle 3 × 8 Rectangle 4 × 6 Rectangle	M1 A1 M1 A1 M1 A1	8													
	b	4 × 6 Rectangle shaded	(M)1 A1														
11	a	i) thirty-five past ten	B1	6													
		ii) 7:45	B1														
	b	i) Friday	B1														
		ii) 3	B1														
		iii) nine hundred eighty two	B1														
		iv) Sunday	B1														
12	a	5 18 × 2 = 36 36 + 14 = 50	B1 M1 A1	8													
	b	i) Correct plotting of A and B	B1 B1														
		ii) Point A correctly moved to (6 , 6) and labelled C	(M)1 A1														
		iii) (2 , 4)	B1														
	TOTAL MAIN PAPER: 75 MARKS																