



Annual Examinations for Middle Schools 2025

YEAR 7

MATHEMATICS

MARKING SCHEME

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 (20 marks)

Questions 1-10 (1 mark each) and questions 11-15 (2 marks each)

Que.	Requirements	Mark		Additional Guidance
1	171.77	B1	1	
2	$\frac{14}{5}$	B1	1	
3	5.7	B1	1	
4	30	B1	1	
5	Any angle between 20° and 30°	B1	1	
6	3.5 m	B1	1	
7	21	B1	1	
8	8 or 8.0	B1	1	
9	9000	B1	1	
10	0.55	B1	1	
11	$\frac{7}{14} - \frac{4}{14}$ $= \frac{3}{14}$	(M)1 A1	2	
12	$\frac{45 + 17}{62}$	(M)1 A1	2	
13	Cancelling out numbers $\frac{5}{12}$	(M)1 A1	2	
14	$\frac{64 \times 2}{128}$	(M)1 A1	2	
15	$\frac{24 + 24 + 12}{60}$	(M)1 A1	2	

Main Paper (80 marks)

Que.	Requirements	Mark		Additional Guidance
1	a) 347 204	B1	7	
	b) 1, 2, 3, 4, 6, 9, 12, 18, 36	B2		B1 at least 5 correct B1 all correct
	c) $2 \times 2 \times 3 \times 5$ 60	M1 A1		Award M1 for correctly attempting to find LCM
	d) 2 Accept any odd prime number	B1 B1		

2	a)	i) $\frac{3}{4}$ written first $\frac{3}{4}, 1.5, 2\frac{1}{4}, 3$ ii) Correct position of numbers	(M)1 A1 B2	6	B1 for each correct answer
	b)	i) $\frac{9}{20}$ ii) 40%	B1 B1		
3	a)	$143 \div 5$ 28.6°C	M1 A1	6	
	b)	Putting temperatures in order 28°C	(M)1 A1		
	c)	31°C - 27°C 4°C	(M)1 A1		
4	a)	$(1.5 \times 20) + €50 + 127$ €207	M1 A1	4	f.t. from a)
	b)	$\frac{15}{100} \times 207$ €31.05	M1 A1		
5	a)	$480 \div 32$ €15	(M)1 A1	4	f.t. from a)
	b)	15×44 €660	(M)1 A1 f.t.		
6		$135 \div 60 = 2 \text{ hr } 15 \text{ mins}$ $5:30 + 2 \text{ hr } 15 \text{ mins}$ 7:45 p.m.	M1 M1 A1	3	
7	a)	$980 \div 28$ 35 packs	(M)1 A1	7	f.t. from a)
	b)	31×4.75 €147.25	(M1) A1		
	c)	4×3.50 $14 + 147.25$ €161.25	M1 M1 A1 f.t.		
8	a)	B	B1	7	
	b)	$4.5 \times 4.5 \times 4.5$ 91.125 91.13 cm ³	M1 (M)1 A1		
	c)	RT 90 FD 75 FD 40	B1 B1 B1		
9	a)	$3a + 8c$	B1	5	
	b)	i) $Y = 6g$ ii) $X = 12g$	B1 B1		
	c)	$4y - 3 + 3 = 5 + 3$ $y = 2$	M1 A1		

10	a)	i) 9.2 m ii) 9.2×3.4 31.28 m ²	B1 M1 A1	5	f.t from a)
	b)	$(7.2 \times 4.4) + 31.28$ 62.96 m ²	M1 A1 f.t.		
11	a)	i) Correct drawing of angle Marking angle with arc ii) reflex	M1 A1 B1	9	$\pm 2^\circ$
	b)	$a = 180 - (55 + 55) = 70^\circ$ Sum of angles in isosceles triangle add up to 180° $b = 70^\circ$ Alternate angles are equal $c = 70^\circ$ Vertical opposite angles are equal	A1 M1 A1 M1 A1 M1		
12	a)	England = 10 France = 5 Germany = 5 Italy = 3 Spain = 7	B3	7	-1 e.e.o.o M1 for 3 correct bars drawn
	b)	Correct bars drawn Labelling of bars	M2 B1		
	c)	$\frac{7}{30}$	B1		
13	a)	Very unlikely	B1	5	o.e.
	b)	i) $\frac{1}{8}$ ii) $\frac{1}{4}$ iii) 0 iv) $\frac{7}{8}$	B1 B1 B1 B1		
14	a)	Correct plotting of coordinates	B2	5	B1 for every 2 correctly drawn points
	b)	Rectangle	B1		
	c)	Two lines of symmetry drawn	B1		
	d)	(1 , 1)	B1		