



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	8.0	B1	1	Accept 8
2	0.573	B1	1	
3	$\frac{22}{9}$	B1	1	
4	26.254	B1	1	
5	18 000	B1	1	
6	$\frac{1}{5}$	B1	1	
7	4200	B1	1	
8	240	B1	1	
9	34	B1	1	
10	-1	B1	1	
11	$\frac{10}{18} - \frac{3}{18}$ $\frac{7}{18}$	(M)1 A1	2	
12	$12 + 18$ 30	(M)1 A1	2	
13	$(85 + 6) \div 7$ 13	(M)1 A1	2	
14	$24 \times 3 + 17$ 89	(M)1 A1	2	
15	$\frac{513}{27} = \frac{171}{9}$ 19	(M)1 A1	2	

Main Paper (80 marks)

Que.	Requirements	Mark		Additional Guidance
1	a) Eight million four hundred seventy six thousand and twenty	B1	5	
	b) i) 4 → tenths 9 → tens 6 → hundredths ii) 98.48	B1 B1 B1 B1		

2	a)	$\frac{2}{7} \times 28 = 8$ $28 - 8 - 4$ 16 squares	M1 M1 A1	6	
	b)	$\frac{3}{4} \times 16 = 12$ $16 - 12 - 2$ 2 squares	M1 M1 A1 f.t.		f.t. from a)
3	a)	$480 \div 32$ €15	(M)1 A1	4	
	b)	44×15 €660	(M)1 A1 f.t.		f.t. from a)
4	a)	A and C	B1	6	both correct
	b)	(i) $55.04 + 66.48 + 55.04 + 60.44$ €237	M1 A1		
		(ii) 0.03×237 €7.11	M1 A1 f.t.		f.t. from bi)
		(iii) $€237 + €7.11 = €244.11$	A1 f.t.		f.t. from bi) and bii)
5	a)	$4x + 3 + 22 + 7(x - 1) + 13$ $4x + 3 + 22 + 7x - 7 + 13$ $11x + 31$	(M)1 M1 A1	6	
	b)	$11x + 31 = 75$ $11x = 44$ $x = 4$	M1 M1 A1 f.t.		f.t. from a)
6	a)	$6 + 13 + 7 + 11 + 8$ $= \frac{45}{5}$ 9 years	(M)1 M1 A1	7	Award M1 for dividing by 5
	b)	Ordering ages 8 years	(M)1 A1		
	c)	$13 - 6$ 7	(M)1 A1		
7	a)	$180^\circ - 105^\circ = 75^\circ$ (angles on a straight line) $360^\circ - (125^\circ + 110^\circ + 75^\circ)$ 50° (sum of angles in a quad is 360°)	M1 A1 M1	8	
	b)	i) $\angle BEC = 180^\circ - 90^\circ - 43^\circ = 47^\circ$ $x = 47^\circ$ Reason: vertically opposite angles are equal ii) $y = 180^\circ - 50^\circ - 47^\circ = 83^\circ$ Reason: sum of angles in triangle is 180°	(M)1 A1 M1 A1 f.t. M1		or angles in triangle is 180° f.t. from i)

8	a)	i) 10:47	B1	6	Accept any of these three: She will arrive late She will arrive at 16:59 She will arrive 19 mins late
		ii) 57 minutes	B1		
	b)	i) 12:04	B1		
		ii) 13 minutes	B1		
	c)	No Because she will not manage to make it on time being 19 minutes late.	B1 A1		
9	a)	Correct line QR (± 0.2 cm) Correct $\angle Q$ drawn ($\pm 1^\circ$) Correct $\angle R$ drawn ($\pm 1^\circ$) Joining triangle and labelling	M1 M1 M1 M1	6	
	b)	PR = 5.3 cm	A1		(± 0.2 cm)
	c)	$\angle P = 63^\circ$	A1		($\pm 1^\circ$)
10		Attempt to divide shape into two cuboids: Vol of A = $16 \times 7 \times 5$ 560 cm^3 Vol of B = $11 \times 7 \times 5$ 385 cm^3 Vol = $560 + 385 = 945 \text{ cm}^3$	M1 A1 M1 A1 A1	5	
11	a)	very unlikely	B1	5	
	b)	i) $\frac{1}{8}$	B1		
		ii) $\frac{1}{4}$	B1		
		iii) 0	B1		
		iv) $\frac{7}{8}$	B1		
12	a)	Marseille – 27 people Lyon – 49 people Paris – 37 people Strasbourg – 48 people Bordeaux – 40 people	B1 B1 B1 B1 B1	9	
	b)	Correct drawing of the bars Labelling of the bar chart	B3 B1		-1 e.e.o.o
13	a)	Correct plotting of points	M3	7	-1 e.e.o.o
	b)	Square	B1		M1 for each two correct lines of symmetry
	c)	All four lines of symmetry correctly drawn	M1 M1		
	d)	A (1, 2)	B1		