SET 2 **KEY MA-7/2**

MODEL QUESTION PAPER

SECOND TERM SUMMATIVE ASSESSMENT 2026-27

MATHEMATICS – ANSWER KEY & SCORING INDICATORS

Standard : 7 **Time : 2 Hrs 15 Minutes**

Instructions to the Teacher

- The scores given are suggestive. Give scores for the correct method even if the final answer is wrong.
- Accept all correct alternative methods.
- Find the percentage of the total score secured and award the grade using the table below.

Score percentage	Grade
80 – 100	A – Outstanding
60 – 79	B – Very Good
40 – 59	C – Good
30 – 39	D – Satisfactory
Below 30	E – Needs Improvement

1.A Ratio

a)	Total parts = 5; one part = 15 ÷ 5 = 3 L. Blue = 6 L, White = 9 L	**2**
b)	6/9 = 2/3	**1**
c)	4 × 3/2 = 6 litres of white paint	**1**
d)	A. 1 : 4	**1**

1.B Ratio

a)	18 : 12 = 3 : 2	**1**
b)	12/18 = 2/3	**1**
c)	Breadth = 27 × 2/3 = 18 cm	**2**
d)	A. 1.5 metres and 1 metre	**1**

2 Powers and factors

a)	$3 = 3^1$, $9 = 3^2$, $27 = 3^3$, $81 = 3^4$	**1**

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b)	3: 1, 3 9: 1, 3, 9 27: 1, 3, 9, 27 81: 1, 3, 9, 27, 81	**2**
c)	2, 3, 4, 5. Number of factors = power + 1	**2**
d)	6 + 1 = 7 factors	**1**

3 Powers

a)	$5^4 = 625$	**1**
b)	$1000 = 10^3$; $100000 = 10^5$	**1**
c)	$3^4 = 81$, $4^3 = 64$. 3^4 is larger.	**2**
d)	$2^3 \times 2^2 = 8 \times 4 = 32 = 2^5$	**2**
e)	A. 3^4	**1**

4 Shorthand in Mathematics

a)	A. 1→ii, 2→iii, 3→i	**1**
b)	5x + 3	**1**
c)	999 + 456 = 1000 + 456 − 1 = 1455	**1**
d)	Two times the sum of two numbers is equal to the sum of two times each number.	**1**
e)	30 − (10 − 4) = 30 − 6 = 24; 30 − 10 − 4 = 16. Not the same. (30 − (10 − 4) = 30 − 10 + 4)	**2**

5 Algebra

a)	$x + 2x = 45 \rightarrow 3x = 45 \rightarrow x = 15$	**2**
b)	$2(b + 3 + b) = 26 \rightarrow 4b + 6 = 26 \rightarrow b = 5$. Breadth 5 cm, length 8 cm	**3**
c)	$s + (s + 30) = 50 \rightarrow 2s = 20 \rightarrow s = 10$. Son 10 years, father 40 years	**2**
d)	$2 \times 3 + 3 \times 2 = 6 + 6 = 12$	**1**

6.A Decimals

a)	12.5 × 4.2 = 52.5 km	**2**
b)	87.5 ÷ 12.5 = 7 litres	**2**
c)	B. 1.2	**1**

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d)	3.6 ÷ 0.4 = 36 ÷ 4 = 9	**1**

6.B Decimals

a)	3 × 3.25 = 9.75 cm	**2**
b)	2.5 × 1.6 = 4 square metres	**2**
c)	B. 1	**1**
d)	22.8 ÷ 4 = 5.7 cm	**1**

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