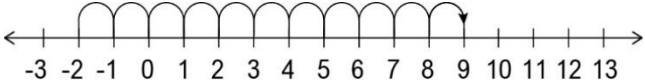


SCHOOL BASED ASSESSMENT 2026
GRADE 8

MATHEMATICS SCORING GUIDE FOR VI

	WORKING	MARKS	REMARKS
1	 9M	M1	Correct number line
		A1	Correct length
		2	
2	$\frac{3}{5} + \frac{1}{10} = \frac{6+1}{10} = \frac{7}{10}$ $\frac{1}{2} \times \frac{7}{10} = \frac{7}{20}$	M1	Total waste fraction
		A1	Plastic waste fraction
		2	
3	Let $x = 1.818181\dots$ $100x = 181.818181$ $100x - x = 181$ $99x = 181$ $x = \frac{181}{99} = \frac{20}{11}$ $x = 1\frac{9}{11}$	M1	Forming the equations
		M1	Equating to find the value of x
		A1	Simplified fraction

		3	
4	0.1948 $\sqrt{19.48 \times 10^{-2}}$ 4.3932 $\underline{+0.0091}$ 4.4023×10^{-1} 0.44023	M1 A1	Convert into standard form Reading from tables Answer
		2	
5	$1500 - 1350 = \text{Ksh. } 150$ $\frac{150}{1500} \times 100$ $= 10\%$	M1 M1 A1	Price decrease Percentage decrease Answer
		3	
6	$5 : 4$ $X : 40$ $\frac{40 \times 5}{4}$ $= 50$	M1 A1	Equating the ratios Working out the answer
		2	
7	$2(3) + 10 = 16 \text{ m}$ $3(3) - 2 = 7 \text{ m}$	M1 A1	Calculating the length and width Getting the perimeter

	$16+7+16+7 = 46 \text{ m}$		
		2	
8	$3x + 2y = 180$ $2x + 3y = 165$ $6x + 9y = 495$ $\underline{6x + 4y = 360}$ $5y = 135$ $Y = 27 \text{ cm}$ Length of rod B is 27 cm	M1 A1 2	Solving for y Stating the length
9	$c = 2\pi r$ $44 = 2 \times \frac{22}{7} \times r$ $44 = \frac{44}{7} \times r$ $r = 7 \text{ cm}$	M1 A1 2	Correct substitution Length of the radius
10	$12 \times 10 \times 2 = 240$ $10 \times 8 \times 2 = 160$ $12 \times 8 \times 1 = 96$ $240 + 160 + 96 = 496 \text{ cm}^2$	M1 M1 A1	Area of the sides Area of the bottom Total surface area

		3											
11	$500\,000 \times \frac{15}{100} \times 1$ $= sh. 75\,000$ $575\,000 \times \frac{15}{100} \times 1$ $= sh. 86\,250$ $575\,000 + 86\,250$ $= sh. 661\,250$	M1	1 st year appreciation										
		M1	2 nd year appreciation										
		A1	Value of land after 2 years										
		3											
12	Angle JKL = 90 ⁰ Diameter JK = 8 cm JKL is a Right -angled triangle	B1	Accurate measure										
		B1	Identify the line										
		B1	Length of the diameter										
		B1	Name of the triangle										
		4											
13	A (1,2)<table><tr><td>X</td><td>-1</td><td>0</td><td>1</td><td>2</td></tr><tr><td>y</td><td>-6</td><td>-2</td><td>2</td><td>6</td></tr></table>	X	-1	0	1	2	y	-6	-2	2	6	B1	Coordinates of A
		X	-1	0	1	2							
		y	-6	-2	2	6							
		B1	Correct values of x										
B1	Correct values of y												
3													
14	(10, 30) X = 10 Y = 30	B1	Point of intersection										
		B1	Correct value of x										
		B1	Correct value of y										
		3											

15	$4.2\text{ cm} \rightarrow 8.4\text{ km}$ $1\text{ cm} \rightarrow 2\text{ km}$ $1 : 200\,000$	B1	Conversion to ratio scale
		1	
16	$b = \sqrt{10^2 + 6^2}$ $= \sqrt{64}$ $= 8\text{ cm}$ $\frac{1}{2} \times 6^3 \times 8 = 24\text{ cm}^2$ $1 : 250$ $1\text{ cm}^2 \rightarrow 62\,500$ $24\text{ cm}^2 \rightarrow ?$ $\frac{24 \times 62\,500}{1}$ $= 1\,500\,000\text{ cm}^2$ $1\text{ ha} \rightarrow 100\,000\,000$ $? \rightarrow 1\,500\,000$ $\frac{1\,500\,000 \times 1}{100\,000\,000}$ $= 0.015\text{ ha}$	M1	Calculating the base
		M1	Area of the scale drawing
		A1	Conversion to ha
	Cone	3	
		B1	Correct name

		1	
18	$\pi r l = \frac{22}{7} \times 21 \times 70$ $= 4620 \text{ cm}^2$ $\frac{22}{7} \times 21 \times 21$ $= 1386 \text{ cm}^2$ $4620 + 1386$ $= 6\,006 \text{ cm}^2$	M1 M1 M1 A1	Area of the curved surface Area of the circular parts Summation of total area Answer
		4	
19	a) Mathematics b) $5 - 4$ $= 1$	B1 M1 A1	Modal learning area Subtraction Correct answer
		3	
20	$3 + 2 + 1 = 6$ $\frac{2}{6} \text{ or } \frac{1}{3}$	M1 A1	Total probability Probability of picking red
		2	

**SCHOOL BASED ASSESSMENT 2026
GRADE 8**

MATHEMATICS SCORING RUBRICS

STRANDS/Sub strands	EXCEEDS EXPECTATION	MEETS EXPECTATION	APPROACHES EXPECTATION	BELOW EXPECTATION
NUMBERS: Integers, Fractions, Decimals, Squares and Square roots, Rates, Ratios, Proportions and Percentages. Question nos. 1,2,3,4,5 and 6 (14 marks)	Learner scores 11 -14 marks	Learner scores 7 – 10 marks	Learner scores 4 – 6 marks	Learner scores 0 – 3 mark
ALGEBRA: Algebraic Expressions, linear Equations, Linear Inequalities Question nos. 7,8 (4 marks)	Learner scores 4 marks	Learner scores 3 marks	Learner scores 2 marks	Learner scores 0 -1 mark
MEASUREMENTS: Pythagorean Relationship, Length, area, Volume and Capacity, Time, Distance and Speed, Temperature, and money Question Nos. 9, 10, 11 (8 marks)	Learner scores 7 - 8 marks	Learner scores 5 -6 marks	Learner scores 3 - 4 marks	Learner scores 0 - 2 marks
GEOMETRY, Angles, Geometric constructions. Question nos. 12, 13, 14, 15, 16, 17 and 18 (19 marks)	Learner scores 15- 19 marks	Learner scores 10 - 14 marks	Learner scores 5 - 9 marks	Learner scores 0 – 4 mark
DATA HANDLING AND PROBABILITY: Data representation and Interpretation. Question no.19 and 20 (5 marks)	Learner scores 5 marks	Learner scores 3-4 marks	Learner scores 2 marks	Learner scores 0-1 mark

**THE KENYA NATIONAL EXAMINATIONS COUNCIL
MATHEMATICS SCORING SHEET FOR GRADE 8**

S.No	Name of Learner	Assessment No.	NUMBER S (14 marks)	ALGEBR A (4 marks)	MEASUR EMENTS (8 marks)	GEOMETR Y (19marks)	DATA HANDLING AND PROBABILITY (5 marks)
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