



THE KENYA NATIONAL EXAMINATIONS COUNCIL

SCHOOL BASED ASSESSMENT

MATHEMATICS

(For Regular learners, learners with Physical Impairment and Hearing Impairment)

Grade 8 – 2024

Scoring Guide

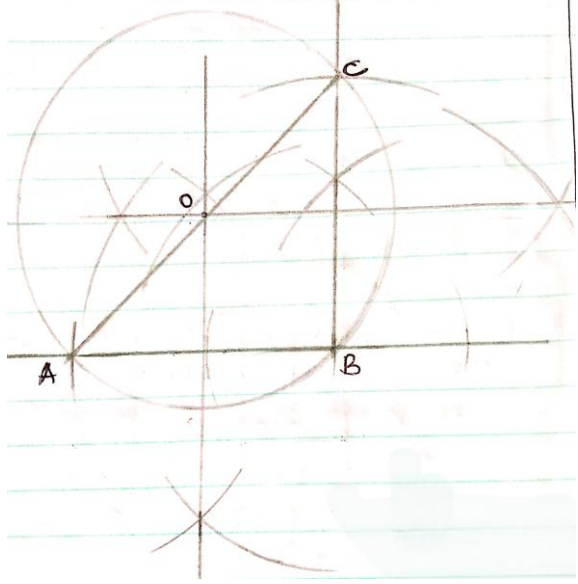
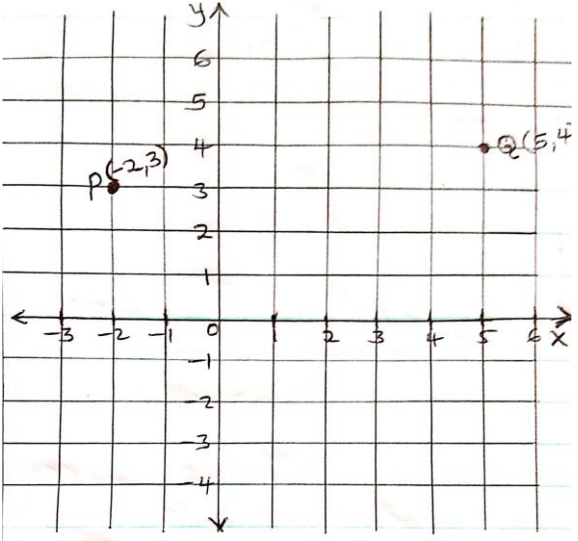
This Scoring guide consists of 8 printed pages.

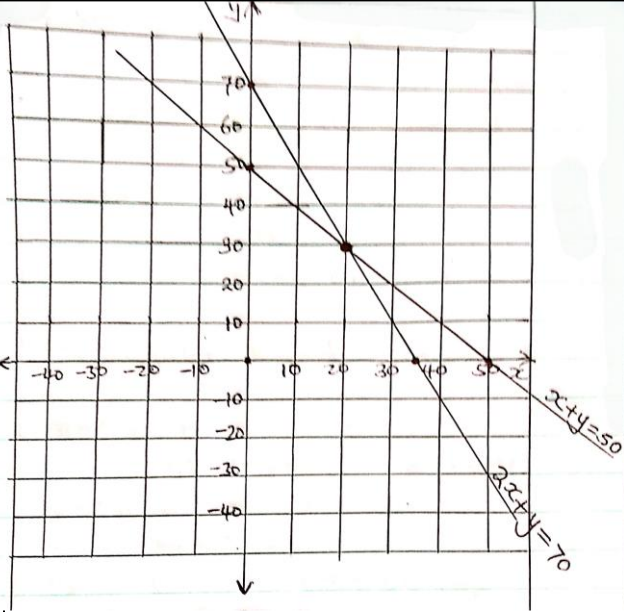
**Mathematics - Scoring Guide
School Based Assessment
Grade 8**

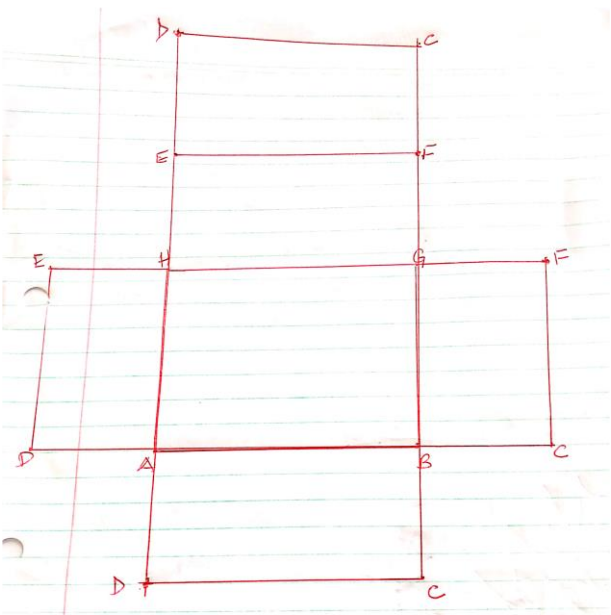
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Question no.	Working	Marks	Comment
1.	Change in temperature = +12	2 2	
2.	Tomatoes = $\frac{1}{5}$ Cabbages = $\frac{1}{2} \times \frac{4}{5} = \frac{2}{5}$ Maize = $1 - \left(\frac{1}{5} + \frac{2}{5}\right)$ $= \frac{2}{5}$	1 1 2	
3.	Let $r = 0.363636\dots$ $100r = 36.363636\dots$ $100r - r = 36$ $99r = 36$ $r = \frac{36}{99} = \frac{4}{11}$	1 1 1 3	
4.	$\sqrt{42.57} = 6.5192$ $\quad + \quad 54$ $\quad \underline{6.5246}$	1 1 2	Reading from tables Answer
5.	Amount of cement = $1 - \frac{2}{3} = \frac{1}{3}$ Ratio, sand : cement = $\frac{2}{3} : \frac{1}{3} = 2 : 1$	1 1 2	
6.	Decrease in milk sold = $20 - 16 = 4$ Percentage decrease = $\frac{4}{20} \times 100\%$ $= 20\%$	1 1 1 3	

7.	$\frac{c^2 + 3d}{4} = \frac{8^2 + 3(4)}{4}$ $= \frac{76}{4} = 19$	1	Correct substitution
		1	
		2	
8.	$4b + 8p = 600$ $2b + 6p = 350$ $4b + 8p = 600$ $\underline{4b + 12p = 700}$ $4p = 100$ $p = 25$ <p>cost of a pen is sh 25.</p>	1	Attempt to solve the equations
		1	
		2	
9.	<p>Arc length = $\frac{30}{360} \times 2 \times 3.142 \times 14$</p> $= 7.331$ $= 7.3 \text{ cm}$	1	
		1	
		2	
10.	<p>Area of curved surface = $\frac{22}{7} \times 56 \times 80$</p> $= 14080 \text{ cm}^2$ <p>Area of circular surface = $\frac{22}{7} \times 28^2$</p> $= 2464 \text{ cm}^2$ <p>Total surface area = $14080 + 2464$</p> $= 16544 \text{ cm}^2$	1	
		1	
		1	
		3	
11.	<p>Interest 1st year = $50000 \times \frac{8}{100} \times 1$</p> $= \text{sh } 4000$ <p>Interest 2nd year = $54000 \times \frac{8}{100} \times 1$</p> $= \text{sh } 4320$ <p>Amount at end of 2nd year = $54000 + 4320$</p> $= \text{sh } 58320$	1	
		1	
		1	
		3	

12.	<p>Sum of interior angles = $(2n - 4) 90 = 540$</p> $2n - 4 = 6$ $n = 5 \text{ sides}$	1	
		1	
		2	
13.	 <p>Radius = $3.6 \pm 0.1 \text{ cm}$</p>	1	Bisecting of two lines
		1	Identification of centre- point of intersection of the line bisectors
		1	Circle constructed
		1	Radius
		4	
14.		1	Correct uniform scale
		1	Plotting the two point
		2	

<p>15.</p>  <p>Point of intersection = (20, 30) Number of boys = 20 Number of girls = 30</p>	<p>1 1</p> <hr/> <p>1 1</p> <hr/> <p>4</p>	<p>For L₁ For L₂</p>
<p>16.</p> <p>10 cm represent 5 km 1cm represents 0.5 km Or 1cm represents 500m</p>	<p>1 1</p> <hr/> <p>2</p>	
<p>17.</p> <p>Let the height of building be x 1cm represents 50cm $10 \text{ cm} = 10 \times \frac{50}{1}$ = 500 cm = 5 m</p>	<p>1 1</p> <hr/> <p>2</p>	
<p>18.</p> <p>Triangular pyramid</p>	<p>1</p>	

19.	 <p style="text-align: center;">$DF = 10.0 \pm 0.1 \text{ cm}$</p>	<p style="text-align: center;">2</p> <p style="text-align: center;">1</p> <p style="text-align: center;">1</p> <p style="text-align: center;">2</p>	<p style="text-align: center;">Correct net with correct measurements</p> <p style="text-align: center;">DF correctly identified</p>
20.	$\text{Mean temperature} = \frac{29+31+32+x+34}{5} = 32$ $126 + x = 32 \times 5$ $x = 160 - 126$ $= 34 \text{ } ^\circ\text{C}$	<p style="text-align: center;">1</p> <p style="text-align: center;">1</p> <p style="text-align: center;">1</p> <p style="text-align: center;">3</p>	

SCHOOL BASED ASSESSMENT 2024**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 3 – 6 marks	Learner scores 0 – 2 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 4 -6 marks	Learner scores 2-3 marks	Learner scores 0 - 1 marks
GEOMETRY, Angles, Geometric constructions. Question nos. 12, 13, 14, 15, 16, 17,18 and 19 (21 marks)	Learner scores 17-21 marks	Learner scores 10 - 16 marks	Learner scores 5 -9 marks	Learner scores 0 – 4 mark
DATA HANDLING AND PROBABILITY: Data representation and Interpretation. Question no. 20 (3 marks)	Learner scores 3 marks	Learner scores 2 marks	Learner scores 1 marks	Learner scores 0 mark

**THE KENYA NATIONAL EXAMINATIONS COUNCIL
MATHEMATICS SCORING SHEET FOR GRADE 7**

S.N o	Name of Learner	NUMBERS: Whole numbers, Factors, Fractions, Decimals, Squares and Square roots Question nos. 1,2,3,4,5 and 6 (14 marks)	ALGEBRA: Algebraic Expressions, linear Equations, Linear Inequalities Question nos. 7,8, (4 marks)	MEASUREMENTS: Pythagorean Relationship, Length, area, Volume and Capacity, Time, Distance and Speed, Temperature and Money Question Nos. 9,10, 11. (8 marks)	GEOMETRY: Angles, Geometric constructions. Question nos. 12, 13, 14, 15, 16, 17,18 and 19 (21marks)	DATA HANDLING AND PROBABILITY: Data Handling Question no. 20 (3 marks)	Comment
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