THE KENYA NATIONAL EXAMINATIONS COUNCIL

SCHOOL BASED ASSESSMENT

MATHEMATICS

(For Regular learners, learners with Physical Impairment and Hearing Impairment)
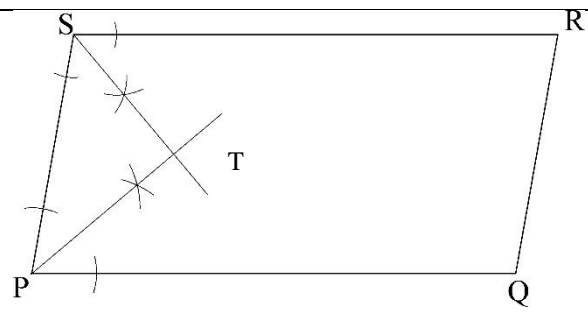
Grade 7 – 2024

Scoring Guide

This Scoring guide consists of 8 printed pages.

Question no.	Working	Marks	Comment
1.	Two million forty five thousand three hundred seventy two	**1**	
		1	
2.	The prime numbers are 2, 7 and 11	1	
		1	
		2	
3.	The LCM of 15 and 18 $15 = 3 \times 5$ $18 = 2 \times 3^2$	1	For factors
	$LC M = 2 \times 3^2 \times 5 = 90$	1	
	Maximum number of oranges $= 90$	1	
		3	
4.	Fraction of book read in one day $= \frac{3}{4} \div 4$	1	
	$= \frac{3}{16}$	1	
		2	
5.	Total value of digit $4 = 0.4$ Total value of digit $8 = 0.08$	1	
	Difference $= 0.4 - 0.08$	1	
	$= 0.32$	1	
		3	
6.	Number of chairs in each row $= \sqrt{324}$	1	
	$= 18$ chairs	1	
		2	
7.	$c + p +(2c + \frac{1}{2}p)$	1	
	$=3c +1\frac{1}{2}p$	1	
		2	

8.	Let the number of books Amina had be x		
	Ali's books = $x + 6$		
	$2x + 6 = 24$	1	
	$x = 9$	1	
		2	
9.	Akinyi's height: $H_A > 1.2m$	1	
	Nzomo's height: $H_N \leq 1.5m$	1	
		2	
10.	Length of longest side = $\sqrt{200^2 + 150^2}$	1	
	$= 250$m	1	
		2	
11.	Circumference of wheel = $\frac{22}{7} \times 2 \times 28$	1	
	$= 176$ cm		
	Distance covered = 176×100	1	
	$= 17600$ cm or 176m	1	
		3	
12.	Area grazed on = Area of trapezium – area of pond		
	$= \frac{1}{2} \times 12(35 + 55) - \pi \times 5^2$	1 ,1	
	$= 461.46$ m^2	1	
		3	
13.	Volume of packet = $6 \times 10 \times 18$	1	
	$= 1080$ cm^3		
	Capacity of packet = $\frac{1080}{1000}$	1	
	$= 1.08$ litres	1	
		3	
14.	2 minutes = 2×60 second	1	Conversion of minutes to seconds
	Kiptoo's speed = $\frac{420}{2 \times 60}$	1	
	$= 3.5$ m/s	1	
		3	

15.	Time in $°C = 355 - 273 = 82°C$	**1**	
16.	Uganda letter costs Sh 1105	1	
	South Africa letter cost sh 3115	1	
	Total cost = 1105 + 3115		
	$\qquad$ = sh 4200	1	
		3	
17.	Loss = 2 300 000 – 1 955 000 = sh 345 000	1	
	Percentage loss $= \frac{345000}{2\ 300\ 00} \times 100$	1	
		1	
	$\qquad$ = 15%		
		3	
18.	Size of exterior angle = 180 – 120 = 60°	1	
	Number of sides of polygon $= \frac{360}{60}$	1	
		1	
	$\qquad$ = 6		
		3	
19.		1	Bisecting angle SPQ
		1	Identifying point T
	Angle PTS = 90 °	1	
		3	
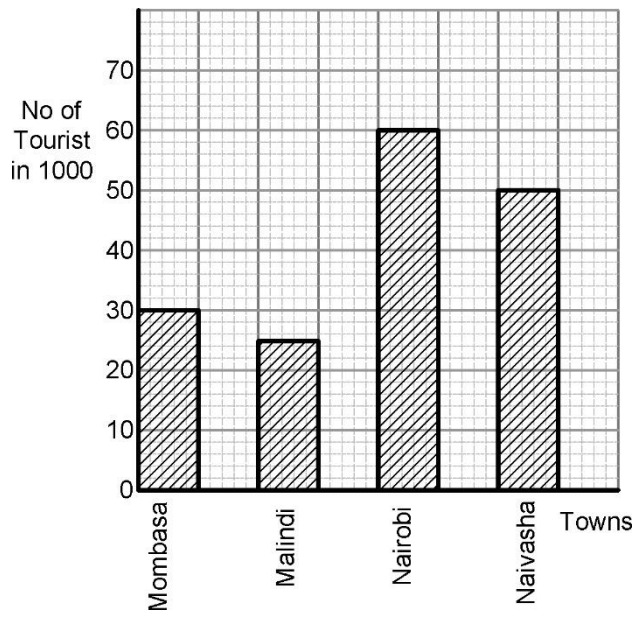
20.		1	Suitable scale used
		2	All bars correctly drawn and labelled. (Allow 1 for 2 bars correctly drawn)
		3	

SCHOOL BASED ASSESSMENT 2023

GRADE 7

MATHEMATICS SCORING RUBRICS

STRANDS/Sub strands	EXCEEDS EXPECTATION	MEETS EXPECTATION	APPROACHES EXPECTATION	BELOW EXPECTATION
NUMBERS: **Whole numbers, Factors, Fractions, Decimals, Squares and Square roots** Question nos. 1,2,3,4,5 and 6 **(13 marks)**	Learner scores **11 - 13 marks**	Learner scores **7 – 10 marks**	Learner scores **3 – 6 marks**	Learner scores **0 – 2 marks**
ALGEBRA: **Algebraic Expressions, linear Equations, Linear Inequalities** Question nos. 7,8,9 **(6 marks)**	Learner scores **6 marks**	Learner scores **3 - 5 marks**	Learner scores **1- 2 marks**	Learner scores **0 mark**
MEASUREMENTS: **Pythagorean Relationship, Length, area, Volume and Capacity, Time, Distance and Speed, Temperature, and money** Question Nos. 10, 11, 12, 13, 14, 15, 16, 17**.** **(21 marks)**	Learner scores **17 - 21 marks**	Learner scores **11 - 16 marks**	Learner scores **6 – 10 marks**	Learner scores **0 - 5 marks**
GEOMETRY, **Angles, Geometric constructions.** Question nos. 18 and 19 **(7 marks)**	Learner scores **7 marks**	Learner scores **4 - 6 marks**	Learner scores **2 -3 marks**	Learner scores **0 – 1 mark**
DATA HANDLING AND PROBABILITY: **Data Handling** Question no. 20 **(3 marks)**	Learner scores **3 marks**	Learner scores **2 marks**	Learner scores **1 marks**	Learner scores **0 mark**

Mathematics - Scoring Guide
School Based Assessment
Grade 7

THE KENYA NATIONAL EXAMINATIONS COUNCIL
MATHEMATICS SCORING SHEET FOR GRADE 7

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

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