

STUDENT'S NAME:

PRESIDENT'S OFFICE
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT
MOROGORO MUNICIPAL COUNCIL



FORM ONE TERMINAL JOINT EXAMINATION

CODE: 041

BASIC MATHEMATICS

TIME: 2:30 HRS

MAY, 2025

INSTRUCTIONS:

1. This paper consists of one section with a total of ten (10) questions.
2. Answer all questions.
3. All answers must be written in the spaces provided.

FOR EXAMINER'S USE ONLY		
Question Number	SCORE	EXAMINER'S INITIALS
1		
2		
3		
7		
8		
9		
10		
TOTAL		
CHECKER'S INITIALS		

1. (a) Convert recurring decimal into fraction $0.8\dot{3}$

(b) Evaluate each of the following expression

(i) $|-5| - |-3| + 4(-2)$

(ii) $\left| 2\frac{1}{2} \times \frac{7}{8} \div (-3\frac{3}{4}) \right|$

2. (a) Neema bought a land for Tsh 2,562,000/= and made a profit of Tsh 1,225,000 after selling it. How much did she sell the land?

(b) (i) Represent $-4 \leq X < 2\frac{1}{2}$ on a number line where “x” is a real number.

(ii) Represent $\frac{3}{4}$ on a numberline

3. (a) Round off each of the following according to the instruction given
- (i) 63,504 to the nearest hundreds
 - (ii) 35.6 to the nearest ones
 - (iii) 3.2743 to the nearest hundredths
 - (iv) 0.97381 to three decimal places
 - (v) 38,176 to one (1) significant figure
- (b) The population of children under the age of fifteen years in a certain country in 2002 it was 5,267,910. Round off the population to the nearest.
- (i) Millions
 - (ii) Thousands
4. (a) Estimate the value of $\frac{58.34 \times 109.8}{2.23 \times 47.56}$
- (b) The population of four towns are 88,000, 22,000, 75,000 and 15,600. Estimate the total population to the nearest thousands.
5. (a) (i) Simplify 160:96 in its lowest form

(ii) Given $a:b = 1:2$ and $b:c = 3:5$, find $a:b:c$ and $a:c$.

(b) The ratio of men, women and children living at Kasisi village is $9:5:4$. If there are 360,000 people in the village.

(i) How many men are in the village?

(ii) Find the total number of women and children in the village

6. (a) A special cereal mixture contains rice, wheat and corn in the ratio $2:3:5$ respectively. If a bag of the mixture contains 3 kilograms of rice. How much corn does it contain?

(b) In a triangle the ratio of the sides is $4:2:1$. If the perimeter of the triangle is 49 cm. Find,

(i) The length of the largest side

(ii) The length of the smallest side

7. (a) If the four angles of quadrilateral are given in degrees as $(4x - 20^\circ)$, $(3x + 40^\circ)$, $(3x + 50^\circ)$ and $(x + 30^\circ)$. Find the value of x

(b) Simplify $8m^2n - 6a^2c + 14 - 4m^2n + 3a^2c - 8$ and then state

- (i) The coefficient of m^2n
- (ii) The number of terms
- (iii) The constant term

8. (a) (i) The difference between 24 and another number is 8. Form a linear equation connecting the numbers and then find the value of such another number.

(ii) Find the value of “ x ” that satisfied the equation $x - 8 = 16 - 2x$

(b) Find the value of “ x ” and “ y ” in the following linear simultaneous equation.

$$\begin{cases} 6x + y = 15 \\ 3x + y = 9 \end{cases}$$

9. (a) The sum of the ages of a father and his daughter is 60 years. If father’s age is five times the age of his daughter. Find their ages.

(b) Find the solution of $|2x - 4| \leq 5$ and represent it on a numberline.

10. Why do you think learning mathematics is important in our daily life (5 points)

- i.
- ii.
- iii.
- iv.
- v.