

THE CATHOLIC DIOCESE OF SAME
KINDOROKO GIRLS' SECONDARY SCHOOL
FORM ONE SEPTEMBER MID-TERM EXAMINATIONS

041**BASIC MATHEMATICS****Time: 2:30 Hours****Year: 2024****Instructions**

1. This paper consists of **ten (10) compulsory** questions. Each question carries **ten (10)** marks.
2. Show clearly all the working and answers in the spaces provided.
3. All writing must be in **blue** or **black** ink **except** drawings which must be in pencil.
4. Geometric instruments and graph papers may be used where necessary.
5. Cellular phones, calculators and any unauthorized materials are **not** allowed in the examination room.
6. Write your **Name in Full** on the top right hand corner of every page.

FOR EXAMINER'S USE ONLY		
QUESTION NUMBER	SCORE	EXAMINER'S INITIALS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
TOTAL		
CHECKER'S INITIALS		



1. (a) Write the following numbers in expanded form:

(i) 755556156

(ii) 954625817

(b) Write the following numbers in words:

(i) 281423865

(ii) 23040

2. (a) (i) Compute the sum of all prime numbers between 70 and 90.

(ii) Find the LCM and the GCF of the following numbers: $\frac{18}{2}, \frac{14}{2}, \frac{15}{3}$

(b) Compute the following operations:

(i) $758936125 - 416824014$

(ii) $311106912 \div 85728$

(iii) 232124×2312

3. (a) Write each of the following numbers as the product of its prime factors:

(i) 256

(ii) 2000

(b) Write the place value of the digit 9 from the following given numbers

(i) 9546.25817

(ii) 65986

4. (a) Find the value of each of the following:

(i) $\frac{7}{8} \div 1\frac{5}{9}$

(ii) $\frac{2}{3} + \left(\frac{2}{5} - \frac{1}{9}\right) \div \frac{1}{3}$

(b) Covert the following decimals into fractions:

(i) 1.046

(ii) $0.\dot{8}3\dot{5}$

5. (a) Three pieces of strings measure 96 decameters, 2.8 metres and 1250 millimetres respectively. Find the total length of the three pieces in kilometers.

(b) Find the value of each of the following problems:

(i)	dg	cg	mg
	5	8	9
	x		10

- (ii) What is total number of days of the months of January, July, March and October?

6. (a) Round off each of the following number to the nearest tens.

(i) 0.408

(ii) 311.114

(b) (i) Find the value of 0.3143×6.06 giving the answer to 3 significant figures.

(ii) Write 0.7526 correct to 3 decimal places.

7. (a) A father is 32 years older than his son. After 4 years the father's age will be twice the age of his son. Find their present ages.

(b) Solve for x and y given that:

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

8. (a) Show the solution of the following operation on a number line.

$$\left| x - \frac{1}{2} \right| > 4$$

(b) Simplify $4\frac{1}{10} : 12\frac{3}{10}$

9. (a) Divide 60000 Tshs among Juma, Ali and John in the ratio 5:3:2 and show how much will each get.

- (b) A house was sold at a profit of 900000 Tshs. If the percentage profit was $37\frac{1}{2}\%$, what was the buying price of the house?

10. (a) Mwanaisha borrowed 2800000 Tshs from a bank which charges an interest rate of 8%. How much interest did she pay after two years and eight months?

- (b) A certain number was multiplied by 8. The product was then subtracted from 41 and the answer obtained was 9. Find that number.