

PRESIDENT'S OFFICE
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT
FRANCISCAN GIRL'S SECONDARY SCHOOL
FORM ONE TERMINAL EXAMINATION

041

BASIC MATHEMATICS

Time : 2:30 Hours

15TH MAY 2024

Instructions

1. This paper consists of **ten (10)** compulsory questions. Each question carries **ten (10)** marks.
2. Show clearly all the workings and answers in the space provided.
3. All writing must be in blue or black ink except drawings which must be in pencil.

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

1. (a) The total mass of 90 students in form one students at Franciscan girls secondary school for the academic year 2024 is 6184.729 kg. Round off this mass

(i). To the nearest hundreds

(ii). Correct to 2 decimal places

(iii). Correct to 3 significant figures

(b) With the aid of a sketch what does the following mean

(i). Reflex angle

(ii). Acute angle

(iii). Obtuse angle

(iv). Right angle

(v). Transversal line

2. (a) Simplify the expression $13 - 2 \times 3 + 14 \div (2 + 5)$

(b) By listing the multiples of 2, 3 and 5. Find the L.C.M of these numbers

3. (a) The sum of two consecutive odd numbers is 96. Find the numbers

(b) Given that $\frac{a+2b}{a-2b} = \frac{1}{2}$, find the value of $\frac{a}{b}$

4. (a) An 80 metre long rope was cut into four pieces. The four pieces were distributed among Form One, Form Two, Form Three and Form Four students. In this distribution, Form One got 15 metres, Form Two got 20 metres, Form Three got 40 metres, and the rest of the piece was given to Form Four.

(i). Write the fraction of the piece of rope distributed to each class.

(ii). Which fraction is the largest of all the fractions

(iii). Find the difference between the largest fraction and the smallest fraction

(b) Each of the 69 form two students in franciscan girls secondary school drinks a litre of Pure water KILIMANJARO every day. If a litre of water cost 800 Tanzanian shillings, how much does the school spend per day ?

5. (a) Given that $x = 0.\dot{2}\dot{3}$ and $y = 0.5\dot{9}$. Express x and y in the form of $\frac{a}{b}$, where $b \neq 0$, a and b are integers, then find the value of $\frac{x}{y}$

(b) Show on the number line the solution set of the inequality $|2x + 1| \geq 3$

6. (a) The exterior angle of a regular polygon is 60° . Find
- (i). Interior angle
 - (ii). Number of sides
 - (iii). Sum of interior angle
 - (iv). Name and draw the polygon

(b) Solve the following system of simultaneous equation

$$\begin{cases} 2x - y = 1 \\ x + 2y = 2 \end{cases}$$

7. (a) Find the number of years in which Tsh. 20,000 will earn an interest of Tsh. 4,800 if the interest rate is 4% per annum

(b) A shopkeeper bought a radio for Tsh. 80,000 and sold it at a profit of 20% . What were the profit and selling price ?

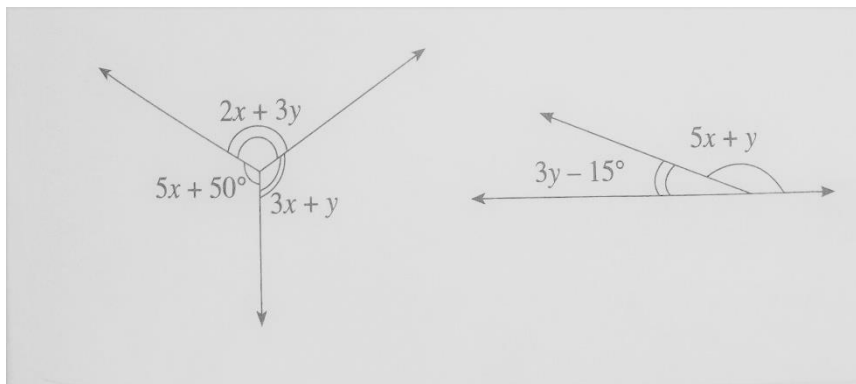
8. (a) Ally and Jane shared 64,000 shilings in the ratio 3:5 respectively. Find the difference between their shares.

(b) Sir mlangi has three classes. Each class has 32, 48 and 64 students respectively. He wants to divide each class into groups so that every group in every class has the same number of students and there are no students left over. What is the maximum number of students he can put into each group ?

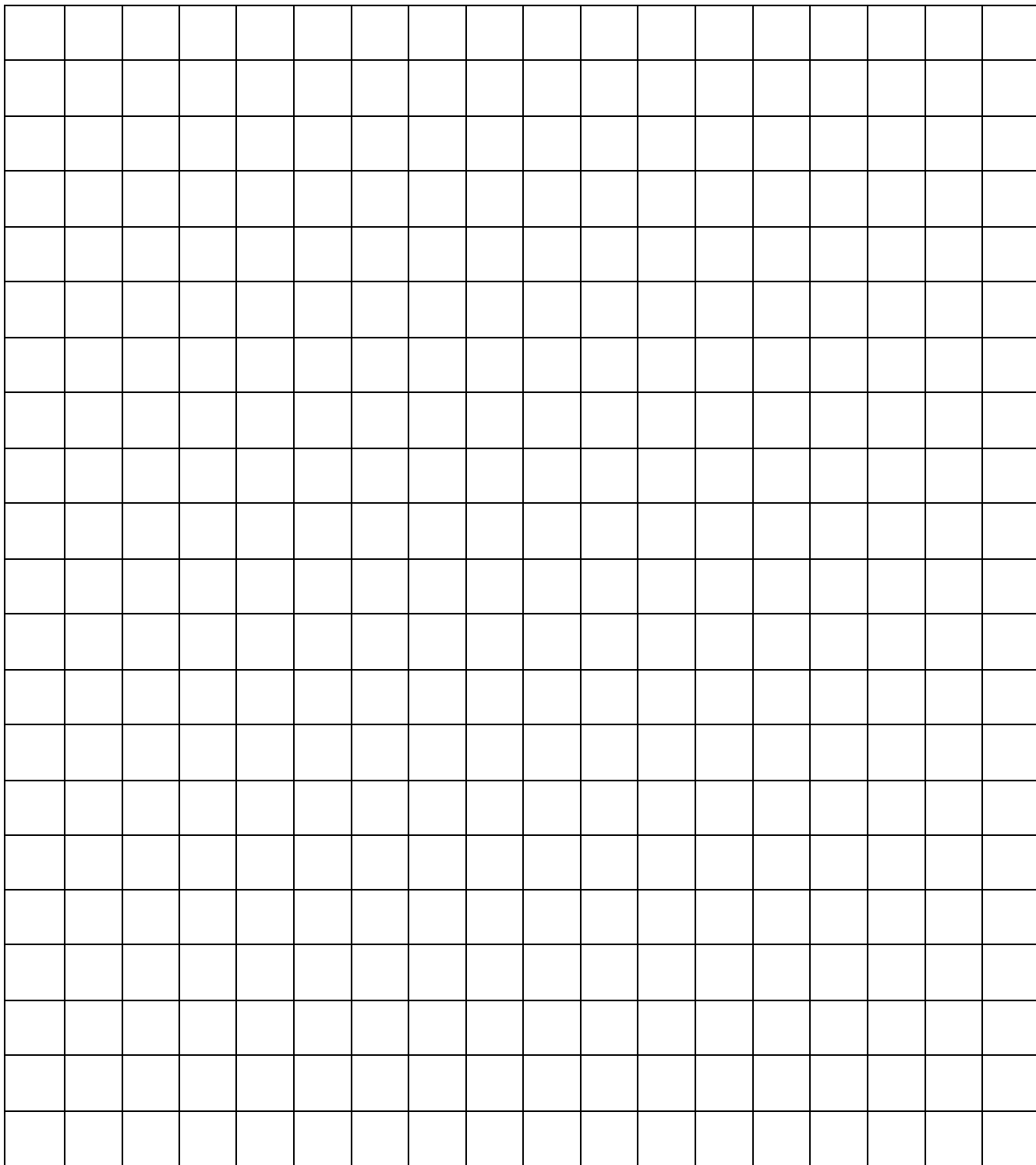
9. (a) The sum of the number of boys and girls in the class is 36. If twice the number of girls exceeds the number of boys by 12. Find the number of boys and girls in the class.

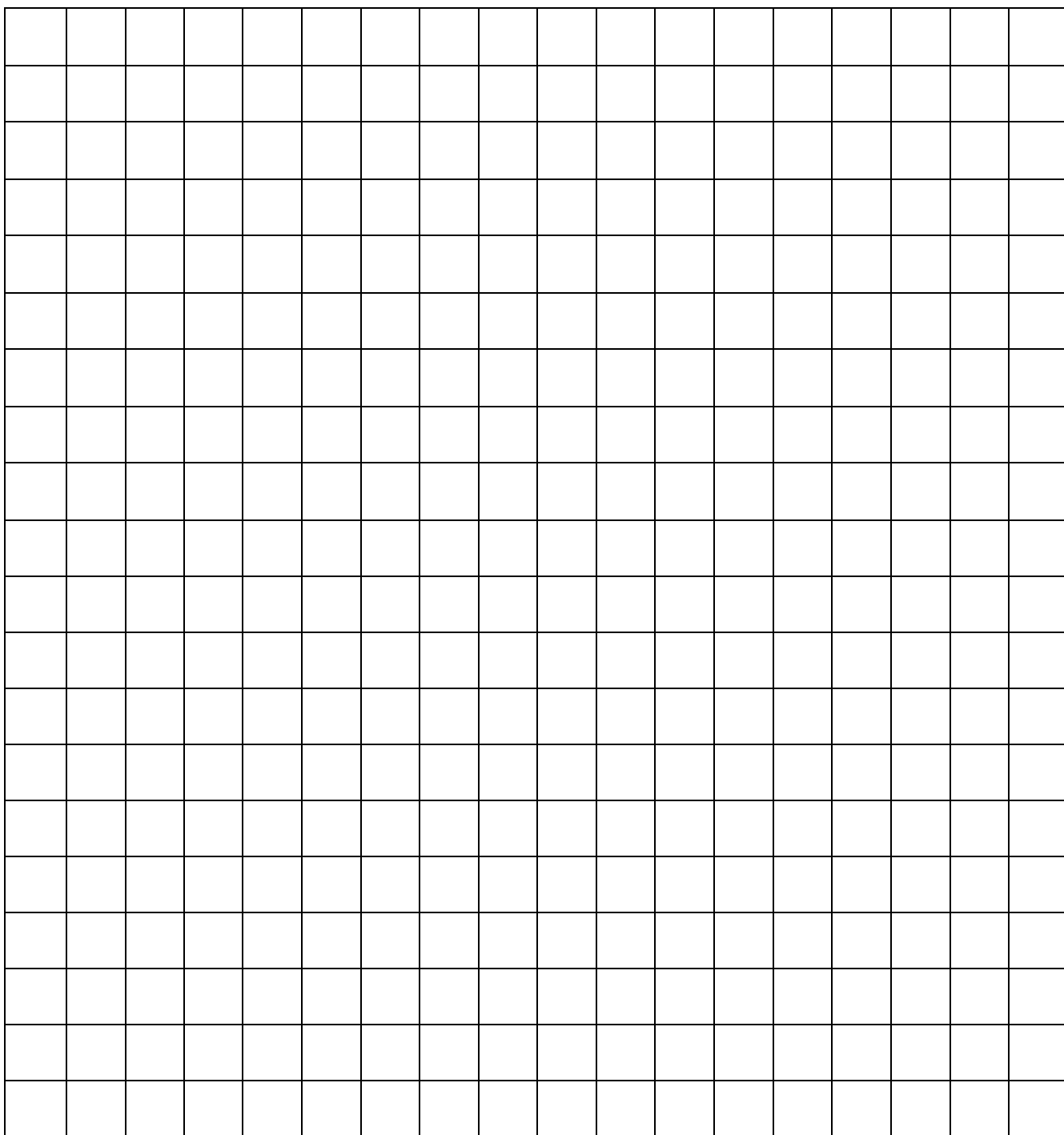
(b) Find the gradient and equation of the straight line joining the points $(-1, 2)$ and $(3, -5)$ (express your answer in form of $y = mx + c$)

10. (a) Use the following two figures to calculate the values of x and y



(b) Use x -intercept and y -intercept method to sketch the graph of $2x - y = -3$ and hence determine its gradient





*****ALL THE BEST*****

“The best way of learning mathematics is through practice”

Prepared By Sir Mlangi May 2024