

ST. MARIE EUGENIE GIRLS SECONDARY SCHOOL
HOME PACKAGE – MARCH 2020
FORM ONE

BASIC MATHEMATICS

INSTRUCTIONS

- (i) Answer all the questions by showing all the necessary steps in solutions.
(ii) Each question has equal marks.

1. Evaluate the followings;

a) $25 - 3 \times 18 + 21 \div 3 - 1$

b) $\frac{1}{2} + \frac{1}{3} \times \frac{4}{3} - \frac{7}{9} + \frac{1}{3} - \frac{1}{2}$

c) $0.75 \times 3 + 1.25 - 3.50 \div 2$

d) $\frac{1}{4} + 2 - 0.25 \times 3$

2. a) Convert the following into the required unit

(i) 2.5 km =dm (iii) 2500 l =kl

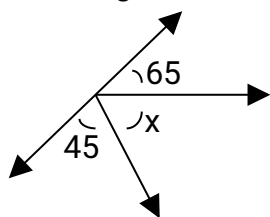
(ii) 30000g = kg (iv) 3.5 hours = min

b) (i) 0.2573 (Approximate to one decimal place)

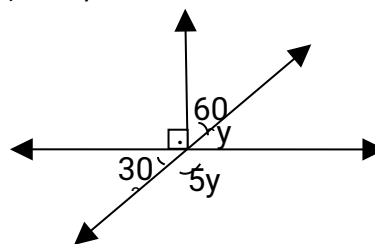
(ii) 754892 (Write in two significant figures)

(iii) Find all possible values of digit a, if 0.7 is the rounded form of the decimal 0.6a to one decimal place.

3. a) Find the angle x



b) Find y



4. a) Solve for x if $x + 3 - 2x = 4x - 3$

b) Solve the following simultaneous equation by elimination method:

$$a + 2b = 7$$

$$2a - b = 4$$

5. Solve the inequality given and show on the number line $-2x + 5 \geq 15$.

6. In a certain school there are 80 boys and 50 girls. On Monday 10% of the boy and 12% of the girls were absent.

a) How many students were absent totally on Monday?

b) What percentage of the students were absent on Monday.

7. Ismail has twice as much as money as Malina. If Ismail gives 1300 Tshs to Malina, they will have the

same amount of money. Find how much money does Malina have?

8. In twenty years time Terry will be twice as old as he was seven years ago. How old is Terry now?

9. Show the following inequalities on the number line:

a) $x > 3$

b) $-2 < x \leq 2$

c) $x \leq -1$

d) $-\frac{1}{2} \leq x \leq \frac{1}{2}$

10. a) Solve for x if $|2x - 5| = 7$

b) Solve for x if $|x - 3| < 2$ and show on the number line.

c) Identify the followings as Rational Numbers or Irrational Numbers:

i) 2.5

ii) $\pi = 3.14 \dots\dots$

iii) $3.\dot{6}$

iv) 4.6725436983.....

******* THE END *******