

END OF TERM THREE EXAMINATION 2022

S.1 MATHEMATICS

TIME: 1 HOUR AND 55 MINUTES

ATTEMPT ALL

SECTION A

1. If a crate carries 24 bottles, write down an algebraic expression for the number of crates needed to carry 72 bottles. find the number of crates?

Also find the number of bottles to be put in 15 crates? (4marks)

2. Three different containers containing 75, 100, and 125 liters of milk respectively. Find the minimum capacity of the container which can take all the milk from the three containers.

(04marks)

3. In your village they are to build an eight equally sided building. Help them establish the inside angles in order for them to start a foundation. (04marks)

4. There are 18 shelves in the school library. 3 shelves are filled with English textbooks and 7 shelves are filled with mathematics textbooks.

a. What fraction of shelves is filled with textbooks?

b. What fraction of the shelves is empty? (05marks)

5. John is facing in the north east direction , what direction will he be facing if he turns;

(i). 180° clockwise

(ii). 135° anticlockwise. (04marks)

6. Use a graph to identify the figure with coordinates A (-4,4), B (-4, -4), C (1,4) and(6,-4) and hence show the other figures that can be formed form this, label them? (05marks)

7. Students at Mother Kevin were asked how they travel to school. The findings were summarized in the tally chart below.

Method of travel	Tally	Frequency
Bike	/// ///	
Bus	////	
Walking	/// /// ////	
Car	////	
	Total	

Copy and complete the table above and draw a pictogram to present the data.
(06marks)

8. Samantha leaves work for home at 6:45pm. Write

- (i). Her departure time in words
(ii). Present it on a 24-hour clock.

(04marks)

SECTION B

9. The diagram shows five number cards.



Put two cards side by side to show

- (i). A two-digit number that is multiple of 7
(ii). A two-digit square number
(iii). A two-digit cube number
(iv). A two-digit prime number.

(05 marks)

- (b) Copy and insert one pair of brackets into this statement to make it correct. (02 marks)

$$7 \times 5 - 2 + 3 = 42$$

(c) Solve for the value of x

(i). $\frac{5x}{4} = 10$ (02 marks)

(ii). $2(8x - 10) + 3 = 32$ (03 marks)

10. Work out the value of angles, x, y and w figures 1 and 2.

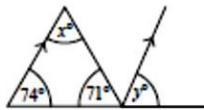


fig.1

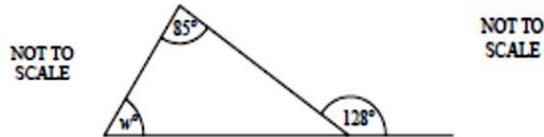


fig.2

(ii). Give reason for your answers. (06 marks)

(b). Using a ruler and pair of compasses only, construct a triangle with sides 5cm, 8cm and 10cm. (03 marks)

(c). A women NGO provides transport refund to every member who attend a seminar as below.

a Trainer of trainers (TOT) is given 40% of the money,

a Trainer is given 30% of the money,

a student lead and other participants share the remaining percentage equally.

As a senior one learner, using the knowledge of angles, drawing figures and percentages, draw a **pie chart** that would help the organization distribute the Transport refund. (Use radius of 4cm) (03 marks)

END