

SUREKEY EXAMINATIONS BOARD PRE - MOCK LOWER WORK EXAMINATIONS SET I

2022

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Admission No.						Personal No.		

Student's Name:
Student's Signature:
School Name:
District Name:

Read the following instructions carefully:

- 1. Do not forget to write your **school** or **district name** on this paper.
- This paper has two sections: A and B.
 Section A has 20 questions and Section B has 12 questions. The paper has 12 printed pages altogether
- 3. Answer **all** questions. **All** the working for both sections **A** and **B** must be shown in the spaces provided.
- 4. **All** working must be done using a **blue** or **black** ball point pen or ink. Any work done in pencil other than graphs and diagrams will **not** be marked.
- 5. **No calculators** are allowed in the examination room.
- 6. Unnecessary **changes** in your work and handwriting that cannot easily be read may lead to loss of marks.
- 7. Do not fill anything in the table indicated: **"For Examiners' Use only"** and boxes

FOR EXAMINERS' USE ONLY						
Qn.No.	MARKS	EXR'S NO.				
1 - 5						
6 - 10						
11 - 15						
16 - 20						
21 - 22						
23 - 24						
25 - 26						
27 - 28						
29 - 30						
31 - 32						
TOTAL						

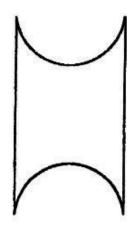
SECTION A: 40 MARKS

Answer **all** questions in this Section Questions 1 to **20** carry two marks each

- 1. Workout: $12 \div 3$.
- 2. Write 49 in Roman Numerals.

3. Given that, Set $A = \{a, b, c, d, e, f\}$ Set $B = \{a, e, i, o, u\}$ Find $n(A \cap B)$

4. How many lines of folding symmetry has the figure below?



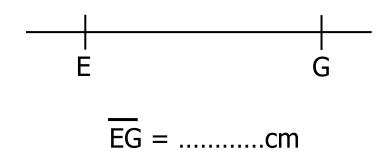
5. Find the next number in the sequence below.

6. What number has been expanded below? 2000 + 600 + 70 + 3

7. In a poultry farm, 30 eggs are packed on each tray. How many trays are needed to pack the 330eggs that were laid on the farm?

8. A baby slept at 8:00a.m. and woke up at 10:00a.m. For how long did the baby sleep?

9. Using a ruler and a divider only, measure line **EG** below.

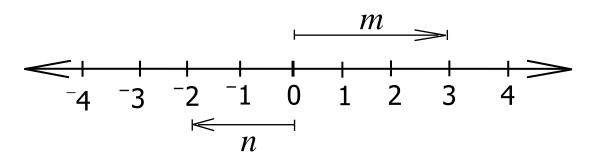


- 10. How many days are in 4 weeks?
- 11. Workout: 7 4 + 2.

12. Given that, $\mathbf{a} = \frac{3}{7}$ and $\mathbf{b} = \frac{2}{7}$. Workout the value of $\mathbf{a} - \mathbf{b}$.

13. The cost of one pen in Kinoni bookshop is Sh.500. What is the cost four similar pens?

14. Write the integer represented by letters m and n on the numberline.



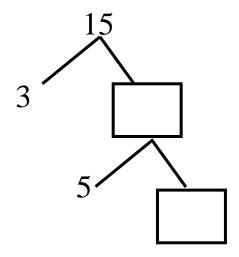
$$m = \dots \qquad \qquad n = \dots \dots$$

15. Draw a shape of **a cone** in the space below.

16. Solve for m. m - 4 = 12.

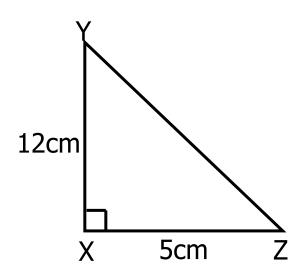
17. David is 6 years older than Paul. If Paul is 14 years old. How old is David?





19. How many $\frac{1}{2}$ litre bottles will fill a 4 litre bucket full of water?

20. Find the area of the triangle *XYZ* below.



SECTION B: 60 MARKS

Answer **all** questions in this section

Marks for each question are indicated in brackets

- 21. (a) Arrange, 4, 6, 9, 3 and 2 from the biggest to smallest. (01 Mark)
 - (a) Use >, < or = to complete the following. (03 Marks)

7 days 1 week

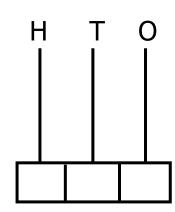
XL LX

1000grams 2 kilograms

22. Teacher Sulait wrote three numbers on small cards as shown below.

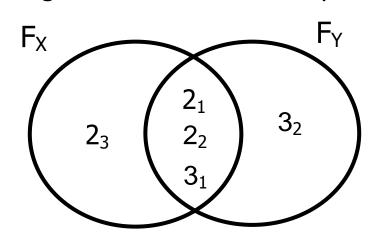


(a) Represent the above numbers on the abacus below, (01 Mark)



- (b) What is the place value of 3 in the numbers represented on the abacus in (a) above? (01 Mark)
- (c) Form the all the 3 digit numbers from the numbers on the above cards. (02 Marks)

23. Use the diagram below to answer questions that follow



(a) Find the value of **X** and **Y**.

(02 Marks)

(ii) **X**

(i) **Y**

(b) Calculate the **LCM** of **X** and **Y**.

(02 Marks)

(c) Work out the **GCF** of **X** and **Y**.

(02 Marks)

24. Angella went to the supermarket and bought the following items.

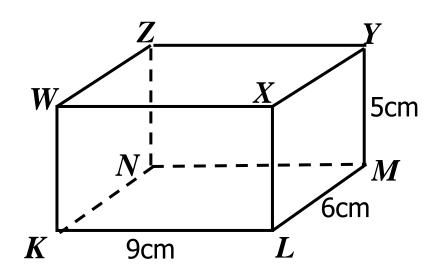
A bar of soap at Sh.7,000 2kg of sugar at Sh.3,000 each kg. One kg of rice at Sh.4,000

(a) How much did Angella pay for all the items she bought?

(02 Marks)

(b) If she went with sh.20,000 to the super market, how much change was she given back? (02 Marks)

25. The diagram below shows a cuboid KLMNWXYZ in which $\overline{KL} = 9$ cm. $\overline{LM} = 6$ cm and $\overline{MY} = 5$ cm.



- (a) Determine the length of lines KM and NZ. (02 Marks)
 - (i) $KM = \dots cm$.
 - (ii) $NZ = \dots cm$.
- (b) Calculate the area of rectangle *LXYM*. (02 Marks)
- (c) Workout the volume of the cuboid *KLMNWXYZ*. (02 Marks)

26. (a) Apollo ate $\frac{1}{4}$ of his cake at breaktime and $\frac{1}{2}$ of it at lunchtime. What fraction of the cake did he eat altogether? (02 Marks)

(b) Change $1\frac{1}{2}$ to an improper fraction. (02 marks)

27. The table below shows the transport fares charged to the 60 passengers travelling to different areas along Mbarara Road by Link bus.

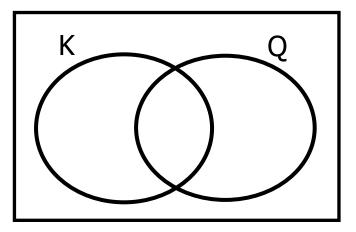
Route	Transport fare		
Kampala to Lukaya	Sh.10,000		
Kampala to Masaka	Sh.12,000		
Kampala to Kinoni	Sh.15,000		
Kampala to Lyantode	Sh.20,000		
Kampala to Mbarara	Sh.25,000		

(a) If 6 passengers got out at Lukaya, 18 got out at Masaka and 15 got out when they reached Kinoni. How much money was collected by the bus from Kampala to Kinoni? (03 Marks)

(b) How many passengers reached Mbarara town? (02 Marks)

(c) How much was the DOS, Apex P/S supposed to pay if he travelled with 4 other teachers from Kampala to Total - Kinoni? (02 Marks)

- 28. Given that, Set $K = \{\text{whole numbers between 4 and 10}\}$ Set $Q = \{\text{even numbers between 2 and 12}\}$
 - (a) Represent the above information on the Venn diagram below.

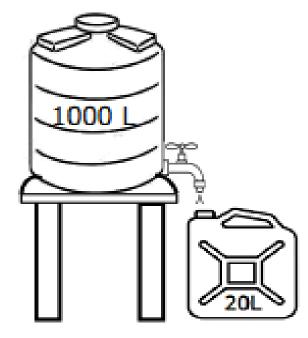


(03 Marks)

(b) How many members has Set Q only?

(02 Marks)

29. Maama Muzeyi has a 1000 litres tank full of water and sells the water using 20 liter jerrycans as shown below.



- (a) How many 20 litre jerrycans does Maama Muzeyi sell from the 1000 litre tank? (02 Marks)
- (b) If she sells each 20 litre jerrycan at Sh.200, how much does she get after selling all the water in the tank? (02 Marks)

30. Using a ruler, a pencil and a pair of compasses only, construct an equilateral triangle of 7cm in the space below. (04 Marks)

30. Find the size of the unknown angles.

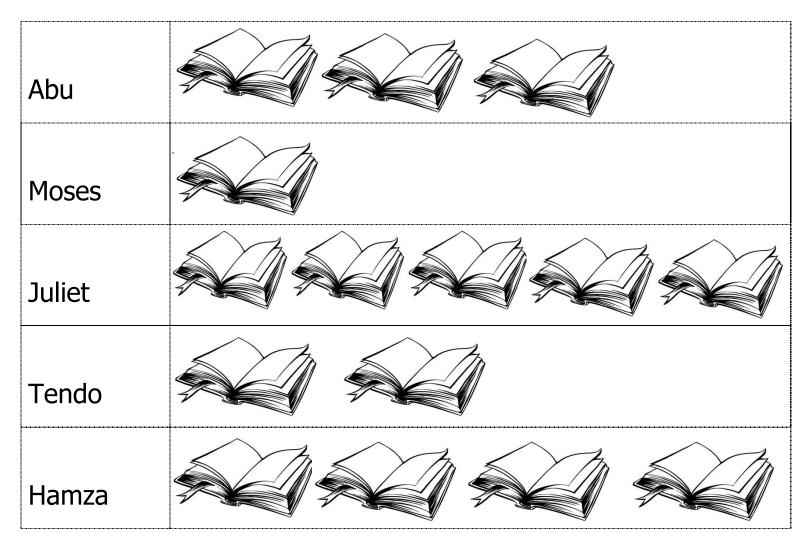
(02 Marks)

y 58°

 135^{0}

(b) (02 Marks)

32. The graph below shows the number of books given to five best pupils indifferent games. Study it and answer the questions that follow.





stands for 10 books.



(a) How many books did Juliet get?

- (01 mark)
- (b) How many more books did Hamza get than Moses? (02 marks)

- (c) Who has the least number of books? (01 mark)
- (d) How many books were given out altogether? (02 marks)



12 END