

SUREKEY EXAMINATIONS BOARD PRE – MOCK LOWER WORKEXAMINATIONS SET II 2022

MATHEMATICS

Time Allowed: 2 hours 30 minutes

| I | ndex | No. | | Personal No. | | |
|---|------|-----|--|--------------|--|--|
| | | | | | | |

| Candidate's Name: |
|------------------------|
| Candidate's Signature: |
| School Name: |
| District Name: |

Read the following instructions carefully:

- 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 | | _ | | |

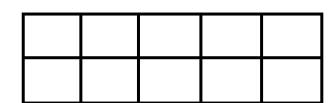
SECTION A: 40 MARKS

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

- 1. Workout: 5 6 -4 5
- 2. Write in figures, 'Two thousand, twenty-two.'

3. Given that, Set $A = \{0, 1, 2, 3, 5, 7\}$ Set $B = \{0, 4, 6, 7, 8, 9\}$ Find n(A \(\mathbf{N} \) B)

4. Shade <u>2</u> of the diagram below. 5



5. Find the next number in the sequence below.

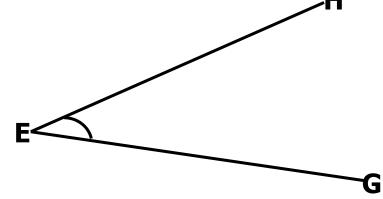
4, 5, 7, 10, 14,

6. Workout the multiplicative inverse (reciprocal) of $\frac{2}{9}$.

7. Akiiki went to Owino Market with two five thousand shillings notes and bought 3 skirts at Sh.3,000 each. Find how much money did she remain with after paying for the skirts.

8. A baby woke up at 10:00a.m. after sleeping for 2 hours. At what time did the baby sleep?

9. Using a ruler, a pencil and a pair of compasses only, bisect angle **HEG** below.



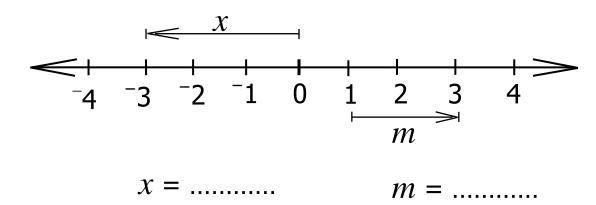
10. A basket contains 2 rotten eggs and 6 good ones. If the eggs in the basket are mixed, what is the probability of picking a rotten egg from the basket?

11. Solve: 4p - 4 = 20.

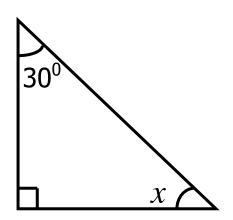
12. Given that, $C = \pi D$, $\pi = \frac{22}{7}$ and D = 35m. Find the value of C.

13. Mr. Ntambi wanted to count the number of pupils with black shoes in the class and tallied them as follows, ### ### ||. How many pupils had black shoes?

14. Write the integer represented by letters x and m on the number line.



15. Determine the size of angle x in the figure below.



16. Convert 112_{three} to base ten.

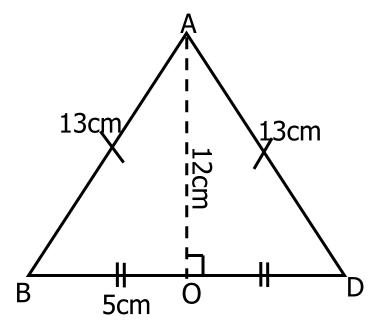
17. Find the Lowest Common Multiple (L.C.M) of 6 and 4.

18. Arrange the following fractions in increasing order.

$$\frac{1}{2}$$
, $\frac{1}{3}$, $\frac{2}{3}$ and $\frac{1}{4}$

19. How many $\frac{1}{4}$ litre bottles will fill a 5 litre bucket of milk to full capacity?

In the isosceles triangle below, \overline{AO} bisects \overline{BD} and $\overline{BO} = \overline{OD}$. Study it carefully and find the area of triangle **ABD**.



SECTION B: 60 MARKS

Answer **all** questions in this section

Marks for each question are indicated in brackets

21. (a) How many days make up 3 weeks?

(02 Marks)

(02 Marks)

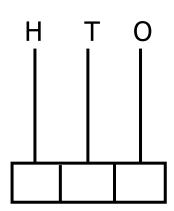
(a) Workout: Hours Minutes 4 40

+3 25

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

3 0 2

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



(b) Find the value of 3 in the numbers on the abacus in (a) above. (02 Marks)

(c) Form the smallest 3 digit number from the numbers on the above cards. (01 Mark)

- 23. At Apex P/S, two bells are used to separate lessons for the lower and upper sections which are rang at intervals of 30 and 40 minutes respectively.
 - (a) After how many minutes will the two sections hear the bell rang for break at the same time? (02 Marks)

(b) If the two sections usually go out for break at 10:30a.m., at what time will they be out together again at the same time? (02 Marks)

(c) List down all the factors of 6. (02 Marks)

24. The figure below is of a rectangle. Study it carefully and answer the questions about it.

$$(3n - 9)cm - (n + 3)cm$$

(a) If the two opposite widths are equal, find the value of n. (02 Marks)

(b) Find the actual size of the length and width in the above figure. (02 Marks)

(c) Calculate its area.

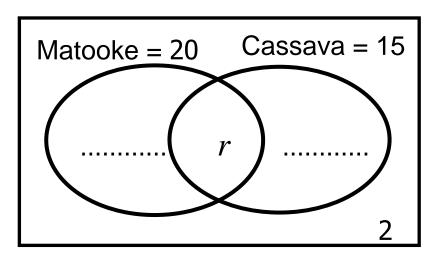
(02 Marks)

25. The table below shows the number of farmers who grow different food crops in Lwengo district.

| Food crop | No. of farmers |
|-----------------------------|----------------|
| Matooke | 20 |
| Cassava | 15 |
| Matooke and Cassava | r |
| Neither Matooke nor Cassava | 2 |
| Total number of farmers | 30 |

(a) Use the above information to complete the Venn diagram below.

(02 Marks)



(b) How many farmers grow both Matooke and Cassava in Lwengo district? (02 Marks)

| (c) | How many farmers grow only one type of food crop in district? | Lwengo 02 Marks) |
|-------|--|---------------------|
| | | |
| At Ap | ex Primary School, $\frac{1}{4}$ of the pupils are boys and 330 ar | e girls. |
| (a) | What is the fraction of girls in the school? | (02 marks) |
| (b) | Find the total number of pupils at Apex Primary school | . (02 marks) |
| | | |

26.

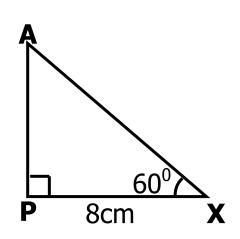
27. The table below shows the items Assimwe bought from KK Shoppers.

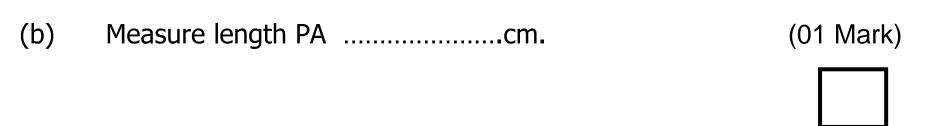
Complete the table correctly. (05 Marks)

| Item | Unit cost | Total cost |
|-------------------------|---------------------|------------|
| 2 kg of sugar | Sh 4,000 per kg | Sh.8,000 |
| 3 kg of rice | Sh. 3200 per kg. | Sh |
| loaves of bread | Sh. 2,000 each loaf | Sh. 4,000 |
| 4 litres of cooking oil | Sh | Sh. 12,000 |
| ½ kg of meat | Sh.6,000 per kg. | Sh |
| Total Ex | Sh | |

28. (a) Using a ruler, a pencil and a pair of compasses only, construct the accurate diagram of triangle **APX** shown in the sketch below. (04 Marks)

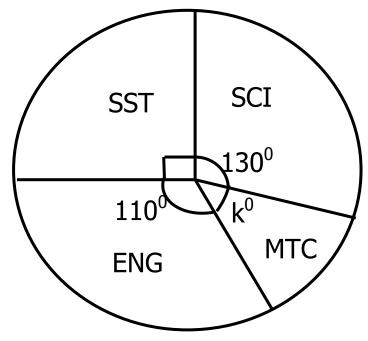
Sketch





29. Link bus left Kampala for Lwengo town with 60 passengers. At Buwama, 15 got out, at Lukaya, 8 boarded and at Nyendo, 12 got out. It then travelled straight to Lwengo town and the rest of the passengers got out. How many passengers reached Lwengo town? (04 Marks)

30. The Pie-Chart below shows how the 72 pupils in P.6 Jupiter performed in the Principal's Set I Examinations. Use it to answer the questions that follow.



(a) Find the value of k.

(02 Marks)

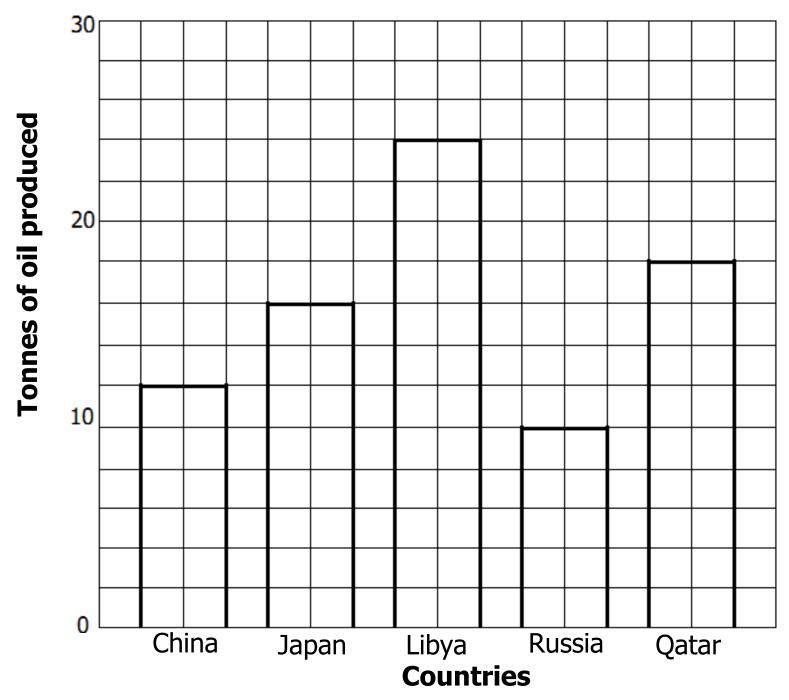
(b) How many pupils passed SCI in the class?

(02 Marks)

(c) How many more pupils passed ENG than SST in the class? (02 Marks)

- 31. (a) Divide: $759 \div 3$.
- (b) Workout: 247 x 12 (02 Marks @)

32. The bar graph below shows the tonnes of oil produced by different countries in the world in 2003. Use it to answer questions that follow.





| (a) | Which country produced fewer tonnes of oil that year? | (01 Mark) |
|-----|---|-----------|
| (b) | How many tonnes were produced by Libya that year? | |

(c) Calculate the total tonnes produced by all the countries that year. (02 Marks)

(b) Convert the tonnes produced by Japan to a percentage. (02 Marks)



12 END