BUGANDA EXAMINATIONS COUNCIL(BECO)
PRIMARY SEVEN MOCK EXAMINATIONS - 2023

MATHEMATICS

Time Allowed: 2 hours 30 minutes.

Index No.

Candidate's Name:.....

Candidate's Signature.....

School Name.....

District .....

READ THE FOLLOWING INSTRUCTIONS:-

1. The paper has **two** Sections **A** and **B.**
2. Section **A** has **20** questions **(40 marks)**
3. Section **B** has **12** questions **(60 marks)**
4. Attempt **All** questions. All answers to both sections **A** and **B** must be written in the spaces provided.
5. All answers must be written using a blue or black ball-point pen or ink. Diagrams should be drawn in pencil.
6. Unnecessary changes of work may lead to loss of marks.
7. Any handwriting that cannot be easily read may lead to loss of marks
8. Do not fill anything in the boxes indicated for examiner's use only.

FOR EXAMINERS' USE ONLY		
Number	**Marks**	**Sign**
1-10		
11-20		
21-30		
31-32		
TOTAL		

SECTION A

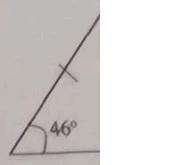
1. Simplify 5q + q - 3q

2. Write 93,099 in words.

3. Convert $\frac{3}{5}$ to a decimal number

4. Work out $11_{two} \times 11_{two}$

5. In the figure below,



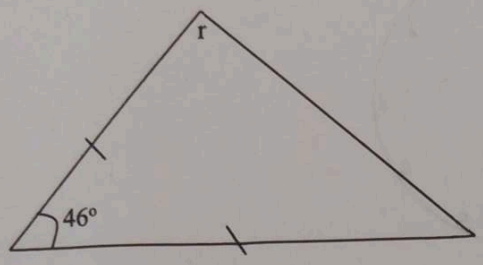
6. The area of a

7. Given th

8. A bo

Turn over

5. In the figure below, find the value of **r** in degrees.

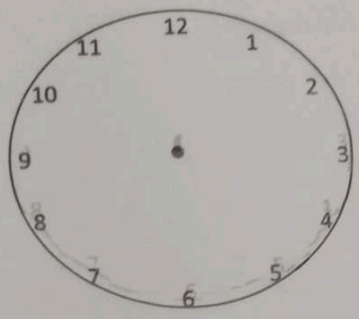


6. The area of a square board is $289m^2$. Find the distance round the square board.

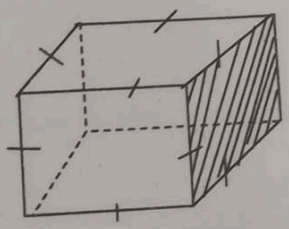
7. Given that n - =4 m = 3 and q = 7, find the value of mn-q

8. A boy bought 45 books for shs. 6000 per dozen. How much money did he spend?

9. On the clock face below, show 20 minutes to 5 o'clock



10. The area of the shaded part is $36cm^2$. Find the volume of the cube.



11. Lukia is 5 times as old as his brother Musa. The product of their ages is 125 years. How old is Musa?

13. Given that R $= \{C, U, P\}$ T $= \{p, e, n\}$ list all the proper subsets in (R∩T)'

14. Work out the median of 36, 29, 40, 25, 18, and 17.

15. Work out the Greatest Common Factor (GCF) of 24 and 36.

16. Convert $3\frac{1}{3}$ % to a fraction in its lowest term.

Turn over

17. Okello shared 315 geometry sets equally among 3 classes. How many geometry sets did each class get?

18. A woman kept shs. 400,000 in a bank at a simple interest rate of 12% per year for 3 years. Find the amount she got after 3 years.

19. Find the product of the value of 3 and the value of 7 in the number of 5730.

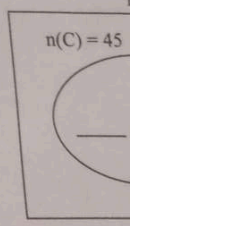
20. Solve P – 4 = 2(finite 5)

Answer all questions in th

Marks for each question

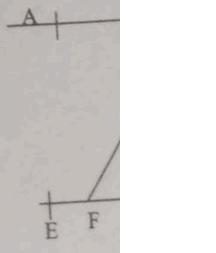
21. In a club of farmers, 45 g
grow both crops while 4

(a) Use the above informatic



(b) If 28 farmers grow

22. The figure belo
and use it to an



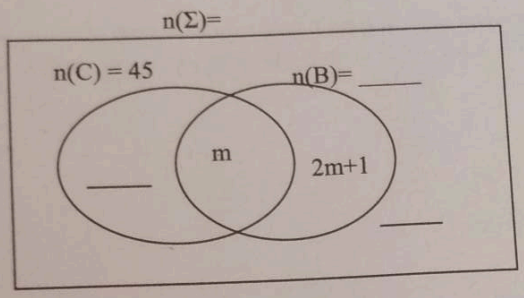
SECTION B

Answer all questions in this section.

Marks for each question are indicated in brackets.

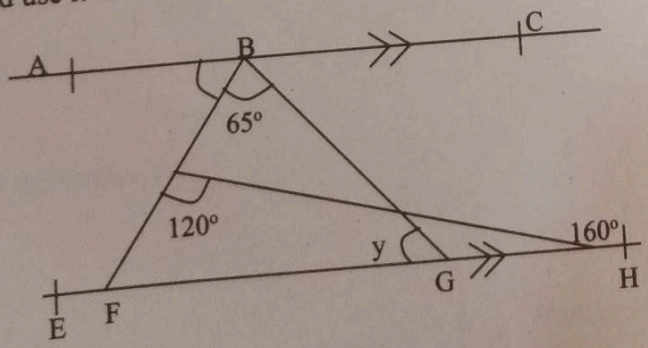
21. In a club of farmers, 45 grow coffee (C) (2m + 1) farmers grow bananas (B), m farmers grow both crops while 4 grow other crops.

(a) Use the above information to complete the Venn diagram below. (03marks)



(b) If 28 farmers grow bananas, find the total number of farmers in the club. (02marks)

22. The figure below shows line segment **AC** which is parallel to line segment **EH**. Study and use it to answer the questions that follow.



(02marks)

(a) Find the size of angle **ABF**.

(02marks)

(b) Find the size of angle BGF

23. A motorist left town **P** for town **Q** at 9:30 a.m driving at a speed of 90km/h. The motorist reached town **Q** at 1:00 p.m.

(03marks)

(a) Work out the time taken to reach town **Q**.

(02marks)

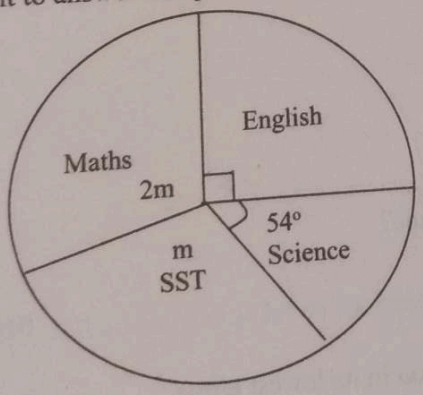
(b) Find the distance between **P** and town **Q**.

24. Ndagire bought 15 glasses for shs. 800 each. As she was transporting them, some glasses got broken and sold the rest at shs. 1200 each getting a profit of 10%. Find how many glasses got broken? (05marks)

25(a) Using a pair of compasses, a ruler and a pencil only construct a quadrilateral **PQRS** where PQ = 7.2cm angle PQR = 90°, QR = 4.5cm, RS = 6cm. (05marks)

(b) Join the figure to form quadrilateral PQRS. (01mark)

26. The pie chart below shows how pupils of a certain school passed in mock examination. Use it to answer the questions that follow.



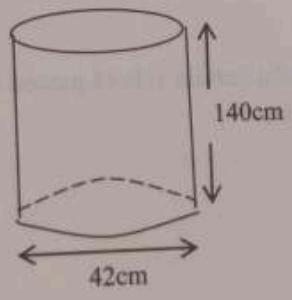
(a) Find the value of m. (02marks)

(b) If 36 pupils contributed to Division 1 in SST, how many pupils in English contributed to Division 1? (03marks)

27(a) Solve the inequality $-3b - 4 \geq 17$ (02marks)

(b) Akiror is 24 years old and Amoding is 36 years old now. At what age was Amoding twice as old as Akiror? (03marks)

28. A welder cut a metallic drum represented by the diagram below to form a door sheet.



What was the perimeter of the sheet he made?

$\left(\pi = \frac{22}{7}\right)$ (04marks)

29(a) Express 0.7272.....as a common fraction in its lowest terms. (02marks)

(b) Work out: $\frac{5}{6} - \frac{3}{4} \div 1\frac{1}{2}$ (03marks)

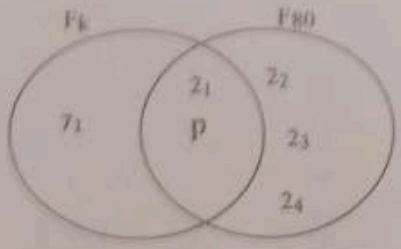
30. Given the digit 3, 5, 0 and 8.

(a) Write the highest four digit number that can be formed using the digits without repeating any. (01mark)

(b) Work out the difference of the highest and lowest numbers that can be formed. (02marks)

(c) Round off the lowest number to the nearest thousands. (02marks)

31. The diagram below shows prime factorization of two numbers. Use it to answer the question that follow.



(a) Find the value of **K**. (03marks)

(b) Work out the Greatest Common Factor of 80 and **K**. (01mark)

(c) What is the Lowest Common Multiple of 80 and **K**.? (02marks)

32. A taxi broke down after covering $\frac{2}{7}$ of the journey, Mukiibi remained with 105km.

(a) How long was the journey? (03marks)

(b) If Mukiibi travelled $\frac{1}{2}$ of the remaining journey on a boda boda, what fraction of the journey did he travel on boda boda. (02marks)

END