SURE KEY EXAMINATIONS BOARD

PRIMARY SIX PROMOTIONAL EXAMINATION

2021

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 write your **school** or **district name** anywhere on this paper.
2. This paper has two sections: **A** and **B**. Section **A** has **20** questions and Section **B** has **12** questions. The paper has **15 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. Subtract: 2002 from 2020.

2. Write 197 in Roman numerals.

3. Work out: $\frac{2}{3} \div \frac{2}{9}$

4. How many proper subsets are in a set with 7elements?

5. Solve for **n** : $\frac{1}{4}\ n^2 = 9$

6. Express 84_{ten} to binary base.

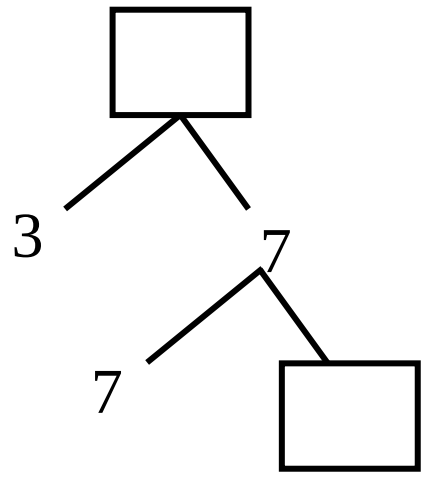
7. Find the least number of sweets which can be shared by 12 boys or 15 boys without leaving any remainder.

8. The average of 4, 8, 6 and ***m*** is 5. Work out the value of ***m.***

9. Using a ruler, a pencil and a pair of compasses only, construct a square **ABCD** Where **AB** = 5cm on the space below.

10. A father is 3 times as old as his daughter. Their total age is 48 years. How old is the daughter?

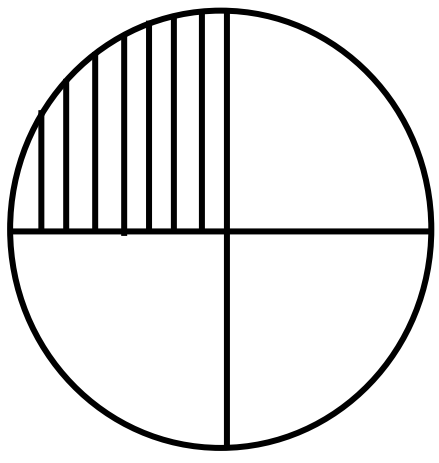
11. Complete the factor tree below



12. Kato is XLIVX years old. Write Kato's age in words.

13. The speed of a car is 60km/hr. What distance will it cover in 20 minutes?

14. Calculate the decimal fraction of the un shaded part on the figure below



15. A pit latrine can be dug by three men in 6 days each earning sh15,000 per day.How much money will be needed to complete the work?

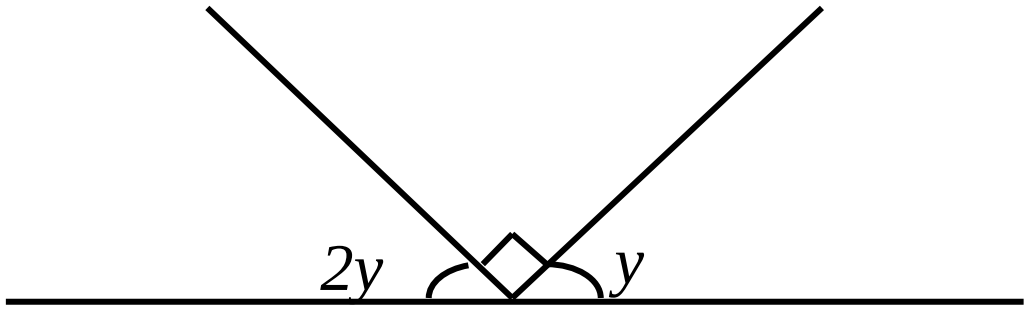
16. Find the next number in the sequence below;

11, 14, 12, 15, 13, ……

17. There are 20% more girls than boys in a certain school. If the boys are 480, find the total number of learners in the school.

18. Express 0032 hours to 12 hours clock time

19. Find the value of ***y*** in degrees.



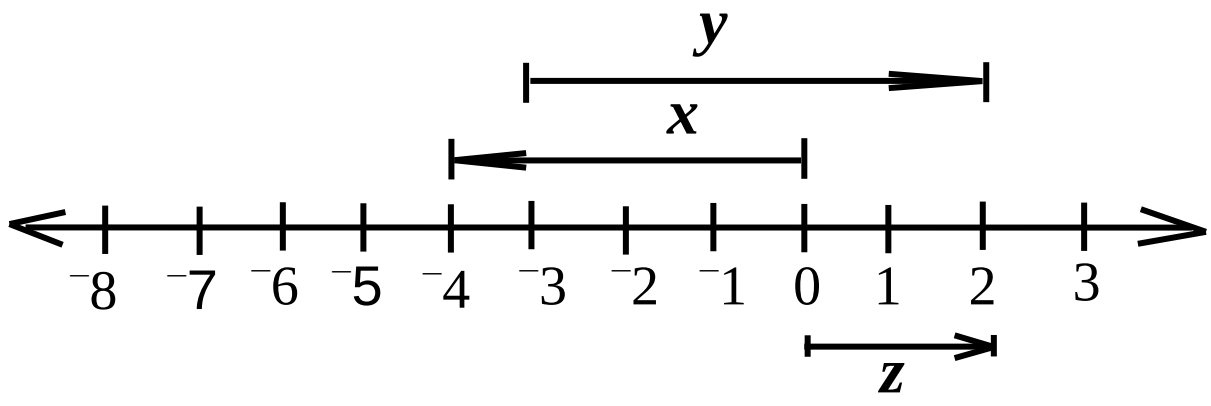
20. Calculate the sum of the fourth prime number and sixth square number.

SECTION B: 60 MARKS

Answer **all** questions in this section

Marks for each question are indicated in brackets

21. Study the numberline below and answer questions about it.



(a) What inters are represented by; (03 Marks)

X .....

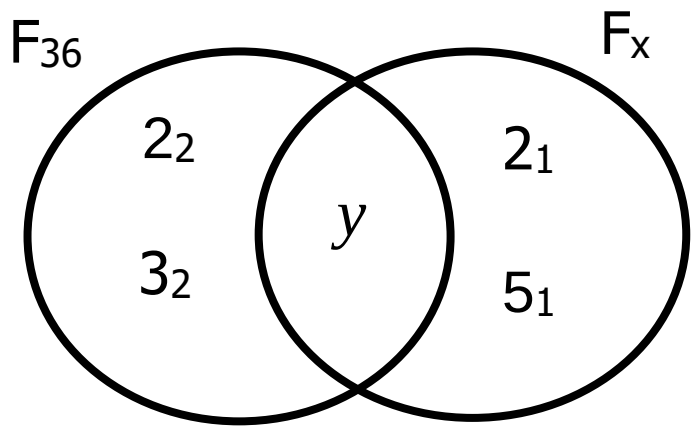
Y .....

Z .....

(b) Write the mathematical statement for the above numberline.

(01 Mark)

22. Use the diagram below to answer questions that follow



(a) Find the value of Y (02 Marks)

(b) Calculate the value of x (02 Marks)

(c) Work out the LCM of F36 and Fx (02 Marks)

23. In Mbale Primary School, three bells are rang at an interval of 30minutes, 40minutes and 60minutes respectively to change lessons.

(a) After how long will the three bells ring together at the Same time? (02 Marks)

(b) If they rang at 1:10p.m, At what time will they ring together again? (02 Marks)

24. (a) Work out $\frac{0.09 \times 0.4}{0.06}$ (03 Marks)

(b) Arrange the following decimals in descending order

0.7, 0.77, 0.07, 0.007 (02 Marks)

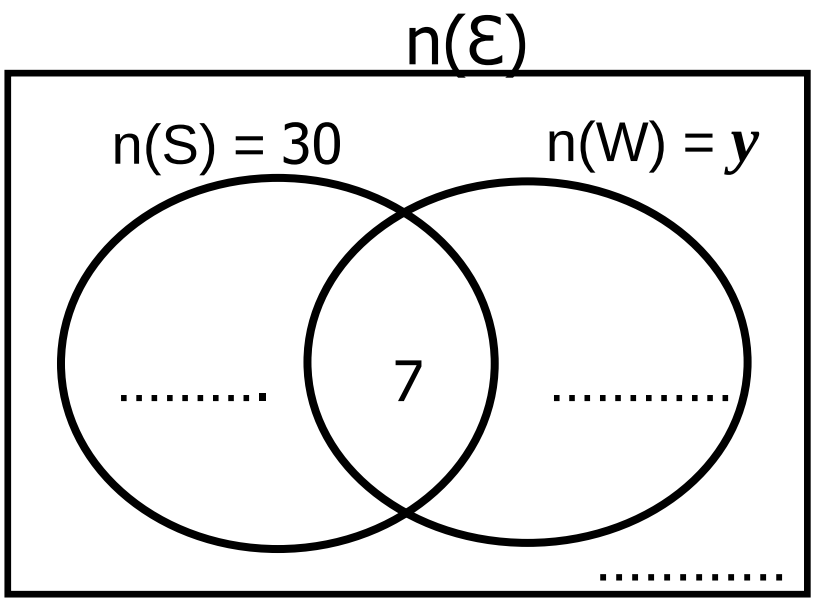
25. The sum of 4 consecutive odd numbers is 40.

(a) Find the numbers (03 Marks)

(b) Calculate their range. (01 Mark)

26. On a sports days held at the school playground, 30 members took soda (S), y took mineral water (W) and 7 members took both soda and mineral water while the number of those who took neither of the two drinks was 6 members less than those who took Soda only.

(a) Complete the above information on the Venn diagram below (03 Marks)

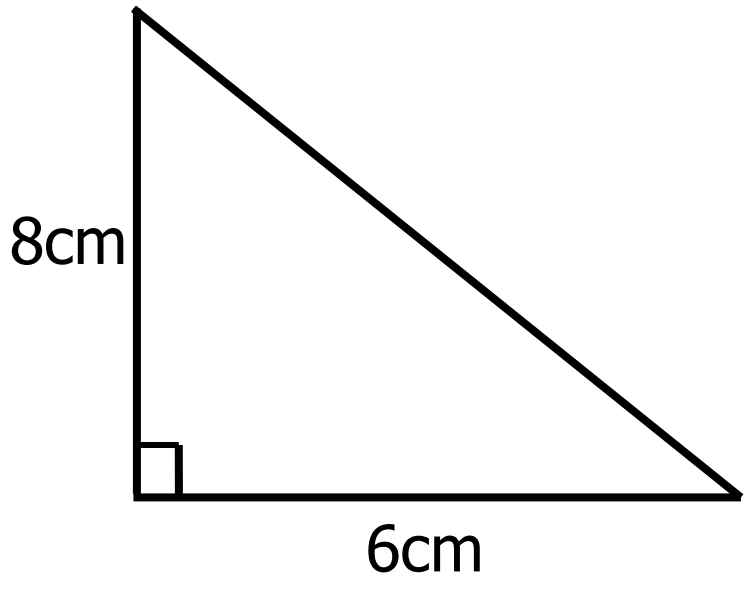


(b) Find the value of y (02 Marks)

(c) Find the total number of pupils in the class. (02 Marks)

Turn Over

27. Study the figure below and answer the questions that follow.



(a) Calculate the area of the above figure. (02 Marks)

(b) Find the total distance around the above figure. (02 Marks)

28. Given digits 4, 0 and 5

(a) List down all possible 3-digits numbers that can be formed.
(03 Marks)

(b) Find the sum of the largest and smallest numeral formed.
(02 Marks)

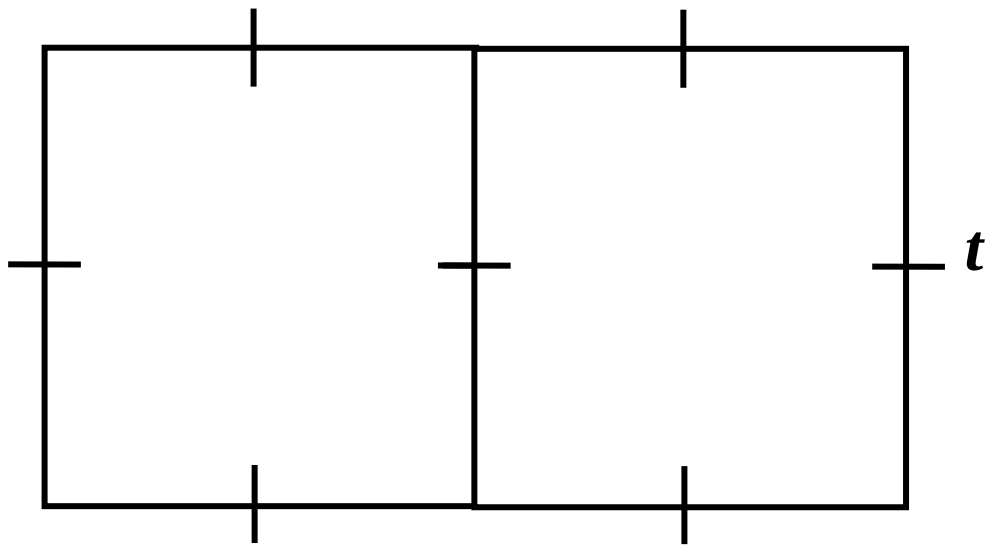
29. During the lockdown period, Nakato went for shopping and bought the following items

2kg of meat at sh.3500@kg
1½kg of rice at sh. 4800 per kg
500grams of salt at sh.2400 per kg
3 loaves of bread at sh. 12,000

(a) How much did she spend altogether? (04 Marks)

(b) If she went with six notes of five thousand shillings.
Find her change. (02 Marks)

30. The figure below is made up of 2 squares. The area of the figure is 128dm^2.



(a) Find the value of t. (02 Marks)

(b) Calculate the perimeter of the figure. (02 Marks)

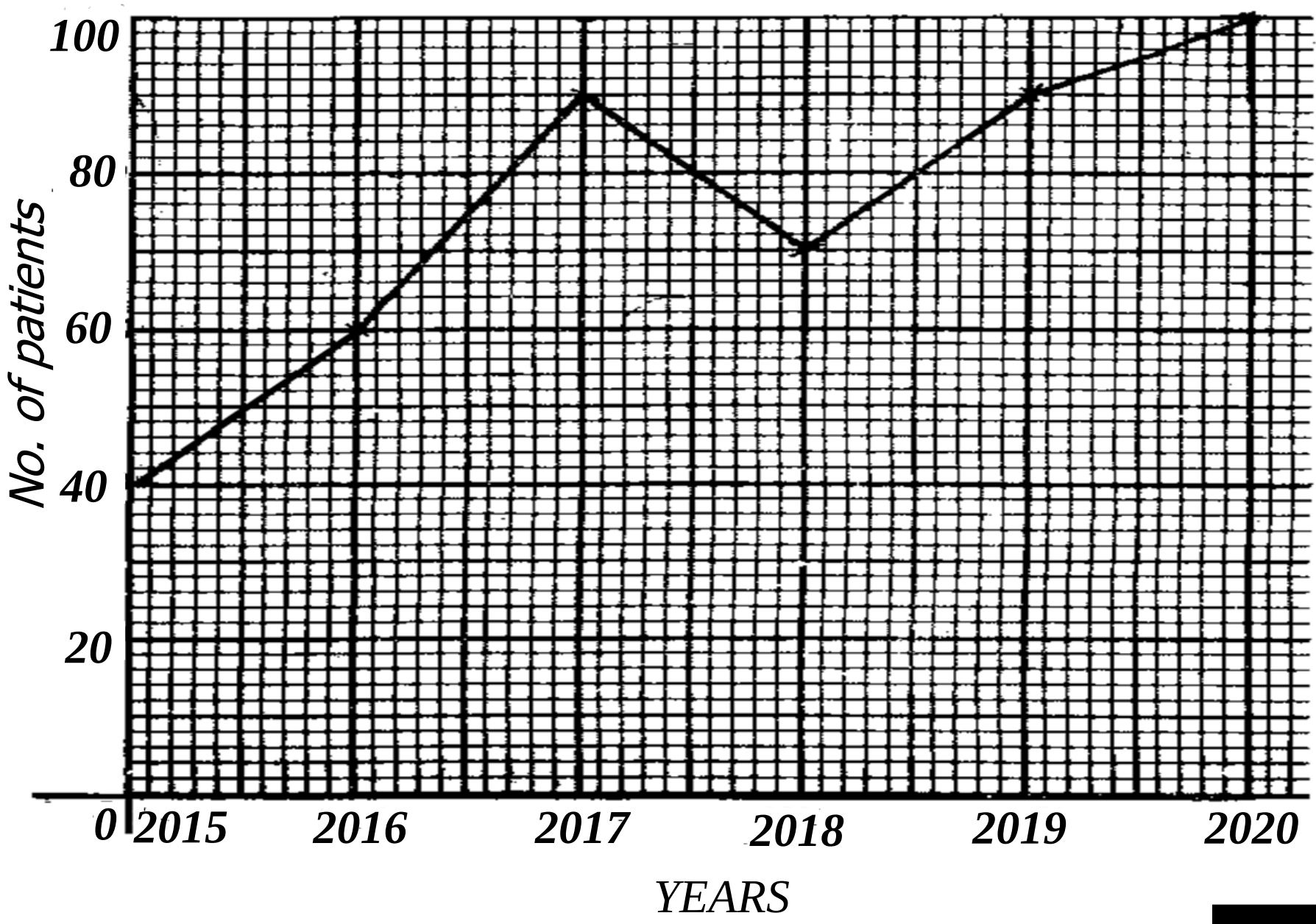
31. In a village of 4000 people, $\frac{3}{10}$ are males and the rest are females.

(a) Find the number of females in the village. (02 Marks)

(b) If $\frac{3}{4}$ of the females are below 18 years, how many female adults are there in the village? (02 Marks)

(c) If $\frac{3}{6}$ of the males are above 18 years, how many are they in number? (02 Marks)

32. The graph below shows how people have been dying of malaria in Kaliro Town. The number of patients has been the same each year. Use the graph to answer the questions that follow.



(a) In which year was the lowest death rate recorded? (01 mark)

(b) In which years was the modal number of patients recorded according to the graph? (01 mark)

(c) Find the average number of patients who die of malaria in KaliroTown. (03 marks)

END