KAMPALA URBAN SCHOOLS

PRIMARY LEAVING SPECIAL MOCK EXAMINATION, 2020

PRIMARY SEVEN

MATHEMATICS

Time allowed: 2 hours 30 minutes

NAME: _____

INDEX NUMBER									

EMIS NO: _____ **SIGNATURE:** _____

Read the following instructions carefully.

1. This paper has **two** Sections: **A** and **B**.
2. Section **A** has 20 answer questions (40 marks)
3. Section **B** has 12 questions (60 marks)
4. Answer **ALL** questions. Answers to both sections must be written in the spaces provided.
5. All answers must be written using a blue or black ballpoint pen or ink Diagrams should be drawn in pencil.
6. Unnecessary alteration of work may lead to loss of marks.
7. Any handwriting that cannot be easily read may lead to loss of marks.

FOR EXAMINERS USE ONLY		
QN. NO.	MARK	SIGN
1 – 10		
11 – 20		
21 – 22		
23 – 24		
25 – 26		
27 – 28		
29 – 30		
31 – 32		
TOTAL		

8. Do not fill anything in the box indicated for examiner's use only.

"Success is for those who work hard."

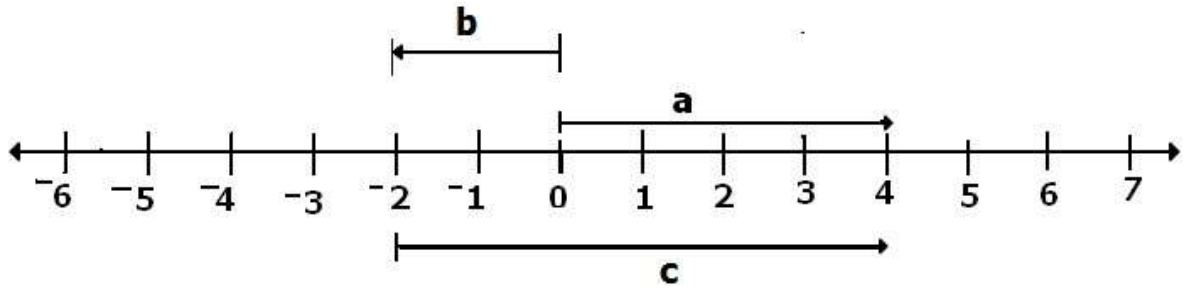
SECTION A: (40 Marks)

1. Work out 13 + 64.

2. Write "fifty-three thousand thirteen" in figures.

3. Simplify: $2ax - 2a + ax + a$.

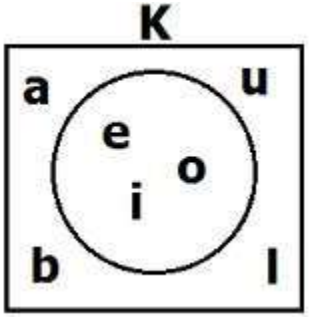
4. Write down the mathematical statement represented on the number line below.



5. Express 25kg as a percentage of a tone.

6. Find the value of 7 and the place vale of 3 in the numeral 3070.

7. Use the Venn diagram below to find KUL.



8. Using a protractor, draw an angle of 100o in the space provided below.

9. Convert 1225 hrs to a 12 hour clock system.

10. Complete the additional table in base five carefully.

+	0	1	2	3
2	2	3	4	_____
3	3	4	10	_____

11. Write 8.7 in standard form

12. In a class of 30 pupils, 18 are boys and the rest are girls. Find the probability of picking a girl to be the class monitor.

13. Calculate the interior angle sum of a regular hexagon.

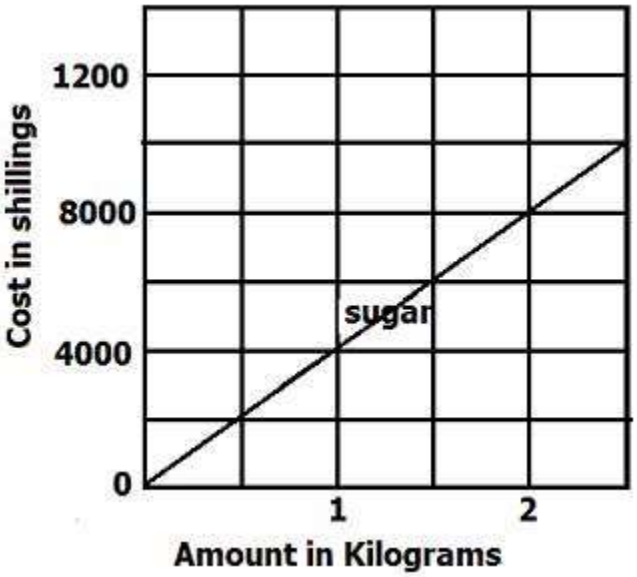
14. Divide: 1 ½ □ ¾

15. A tray of eggs costs shs. 9,500. If a trader sold it at loss of shs. 1,500, at what price did he sell it?

16. Given that a = 55 and b = 45. Work out the value of (a + b) (a – b).

17. With our dividing, show that 453 is divisible by 3.

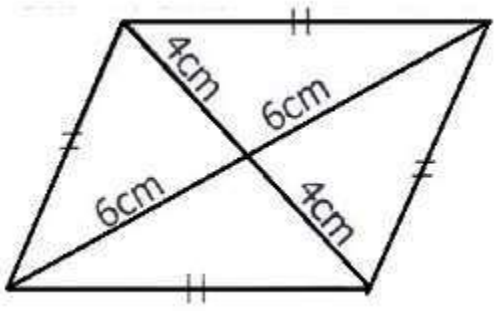
18. The line graph below shows the cost of sugar.



Calculate the cost of 1½ kgs of sugar

19. Simplify: $\frac{1.82 + 0.18}{0.25}$

20. Work out the area of the rhombus below.

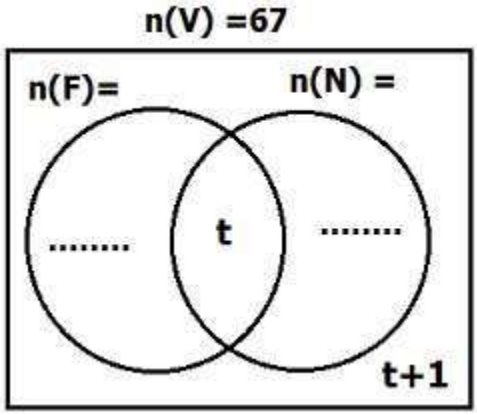


Section B (60 marks)

21. Two bells ring at intervals of 30 minutes and 40 minutes for both lower and upper primary respectively. How many lessons will each class have had by the time all the bells ring together?

22. In a team of 67 players, all of them play volley ball (V), 38 play football (F), 19 play netball only, some players (t) play all the three games while (t + 1) play volley ball only.

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



(b) Find the value of t.

(c) How many players do not play football?

23. The exchange rates at the forex bureau are given as shown below;

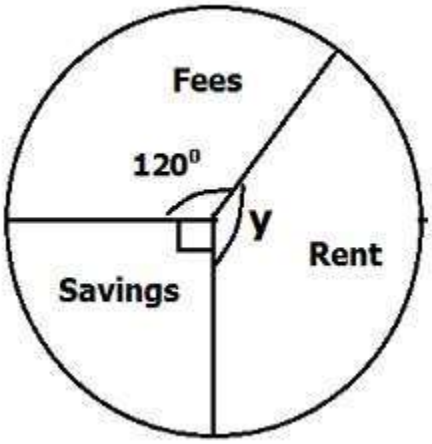
(i) Ksh. 1costs Ug shs. 37

(ii) US $ 1 costs Ug shs. 3700

(a) If the cost of a calculator is K shs. 650, how much would this be in Uganda shillings?

(b) Convert K shs. 8,000 to US dollars.

24. The pie – chart below represents a man's monthly expenditure.



(a) Find the value of y.

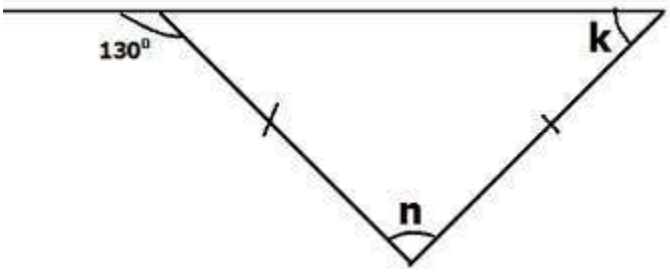
(b) If he spends shs. 30,000 more on fees than he saves, how much does he earn per month?

25. The area of a circular flower garden is $154m^2$.

(a) How long is its diameter?

(b) If the garden is to be fenced with poles planted at intervals of 2m apart, how many poles are needed to fence the garden?

26. **Use the figure below to answer the questions that follow.**



(a) Find the size of angles marked:

(i) k

(ii) n

(b) Work out the complement of $(p + 20)^{o}$

27. John deposited shs. 500,000 in a commercial bank which offers an interest rate of 10% per annum. Calculate the amount of money John earned after a period of 6 months.

28. Anifah scored 30, 40, 30, 50, 30 and 50 in a series of tests.

(a) Find her modal mark.

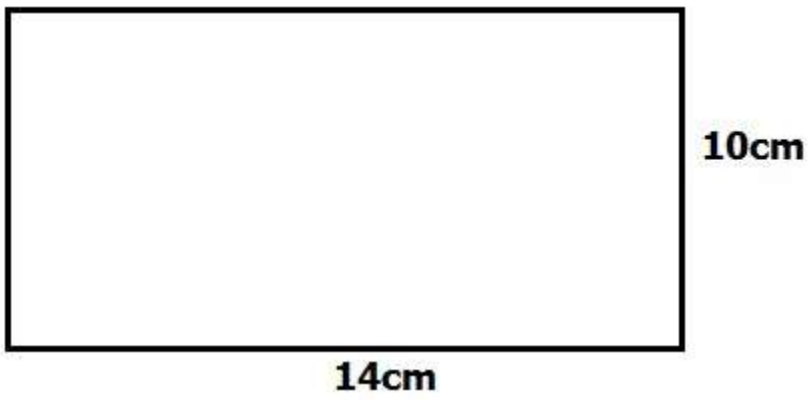
(b) Work out her median mark.

(c) Calculate the mean of X, (2X + 3) and 15.

29(a) Solve: 2m – (2+m) □ 6

(b) A son is only half the age of the father now, their total age is 60 years. How old will the son be in 10 years time from now?

30. The rectangular sheet of metal shown below is folded to form a hollow cylinder.



(a) Find the radius of the cylinder formed.

(b) Calculate the capacity of the cylinder when full of cooking oil.

31(a) A bus left school at 9:00 a.m. and arrived in town at 11:30 a.m. traveling at a steady speed of 80km/hr.

(a) Work out the distance traveled.

(b) If the bus returning using the same route for only 1½ hours, calculate it's average speed for the whole journey.

32. A school office is 60 km West of the staff room and the main hall is 80 km on a bearing of 180^{o} from the staff room.

(a) Draw an accurate diagram to show the above information.

(b) Find the shortest distance between the school office and the main hall

END