SURE KEY EXAMINATIONS BOARD

PRIMARY SEVEN PLE PREPARATION EXAMINATION SET TWO

2022

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Admission No.						Personal No.		

Candidate's Name: ……

Candidate'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 **16 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		

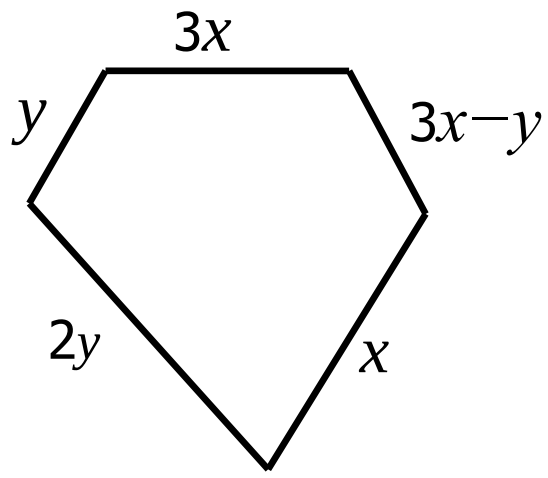
SECTION A: 40 MARKS

Answer **all** questions in this Section

Questions 1 to **20** carry two marks each

1. Subtract: 4 from 301.

2. Workout the total distance around the figure below.



3. Change 434_{six} to the day to day base.

4. Write in figures; A quarter a million one hundred ten.

5. Given that 3 + 5 = n (finite 6). Calculate the value of n.

6. Using a ruler, a sharp pencil and a pair of compasses only, construct an angle of 30^0 in the space below.

7. Fill in the box with the correct missing number.

144 ÷ ☐ = 12

8. Express $\frac{1}{8}$ as a decimal.

Turn Over

9. The table below shows the number of candidates who sat for the PLE Preparation Set One Examination.

Marks	20	85	90	95
No. of learners	|||	𝍸 |	𝍸 ||	||||

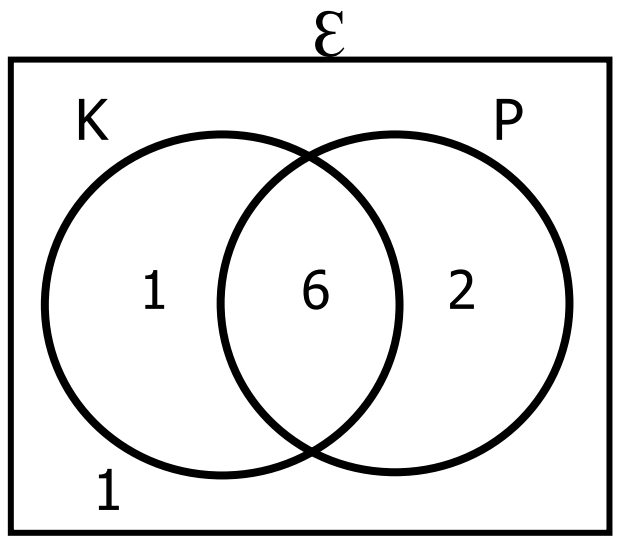
Calculate the average mark of the candidates who sat the examination.

10. Find the least number which when divided by 7, three remain, when divided by 4, two remain, but when divided by 8, six remain.

11. Solve: $\frac{2x + 2}{5} = \frac{x + 4}{4}$

12. Given that, A = πr^2 , r = 1.4cm and $\pi = 3\frac{1}{7}$. Find the value of A.

13. The Venn diagram below shows number of elements in a given set.



Find the number of subsets in n(P ∩ K)′

14. Jane is 4 times as old as Mary. If the difference in their ages is 18 years, how old is Mary?

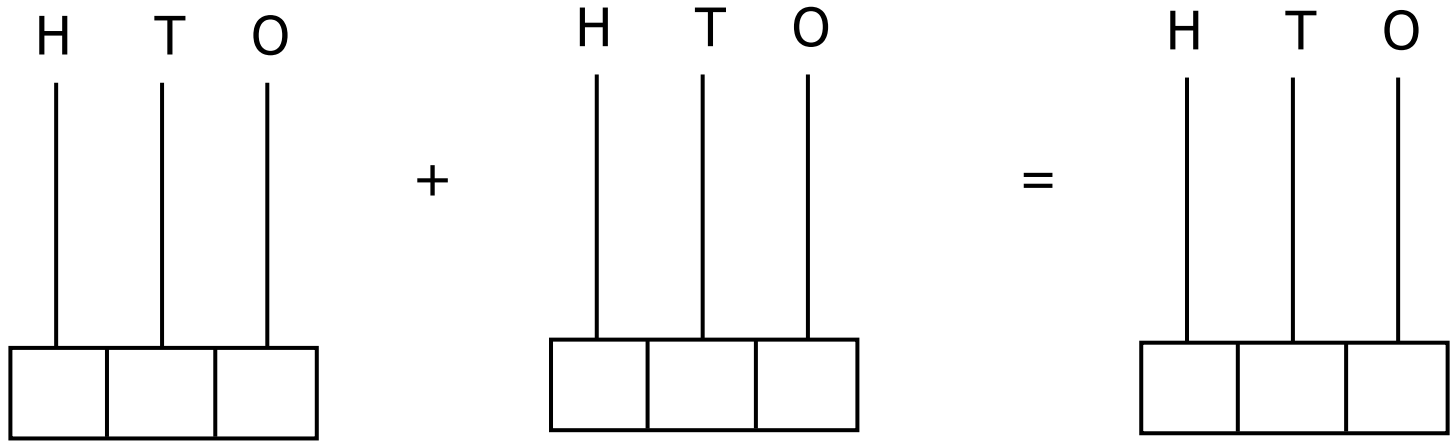
15. Give the next number in the sequence below;

256, 225, 196, …….

Turn Over

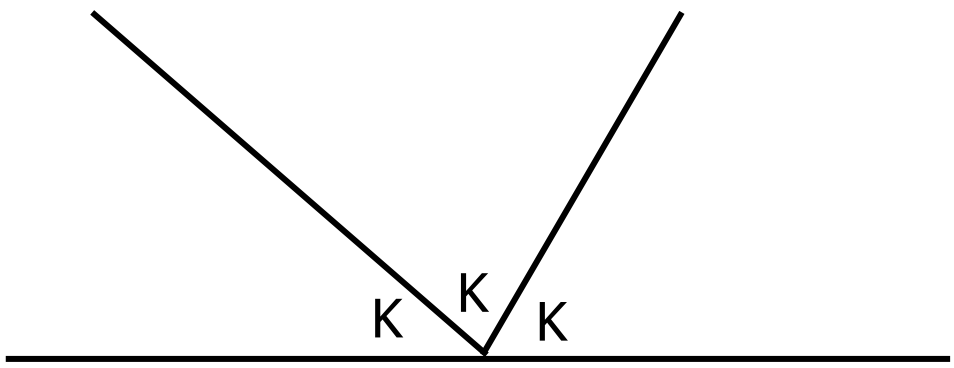
16. A soda factory produced 8376 bottles of soda. How many crates of soda did it produce if each crate contains 24 bottles?

17. Workout: 132 + 415 using the abaci below.



18. Divide (0.9)(1.8) by 0.01.

19. Find the size of angle K.



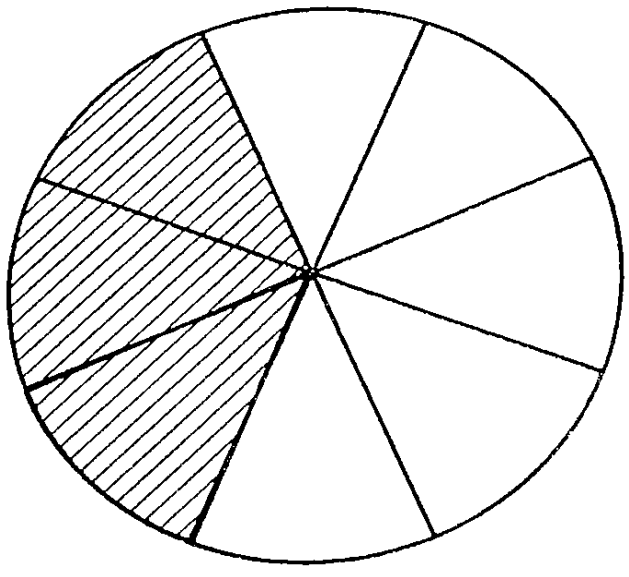
20. Use distributive property to simplify (4.5 x 145) – (45 x 4.5)

SECTION B: 60 MARKS

Answer **all** questions in this section

Marks for each question are indicated in brackets

21. The shaded part in the figure below represents the number of boys in a school.



If there are 490 girls in the school,

(a) How many pupils are in the school? (03 Marks)

(b) How many more girls than boys are in the school? (02 Marks)

22. Robert deposited some money in the bank which offers a simple interest rate of 12% per annum for 15 months. If he received an interest of sh.45,000.

(a) What amount of money did he deposit in the bank? (03 Marks)

(b) Calculate the amount of money he received at the end of 15 months. (02 Marks)

23. The sum of 4 consecutive even numbers is 60, If the highest number is k, Calculate their range. (04 Marks)

24. Nakalanzi bought the following items at a shop.

$3\frac{1}{2}$ kg of beans at sh.1,200 per kilogram.

$1\frac{1}{2}$ kg of salt at sh.1,000 per kilogram.

4 bars of soap at sh.7,000 per bar.

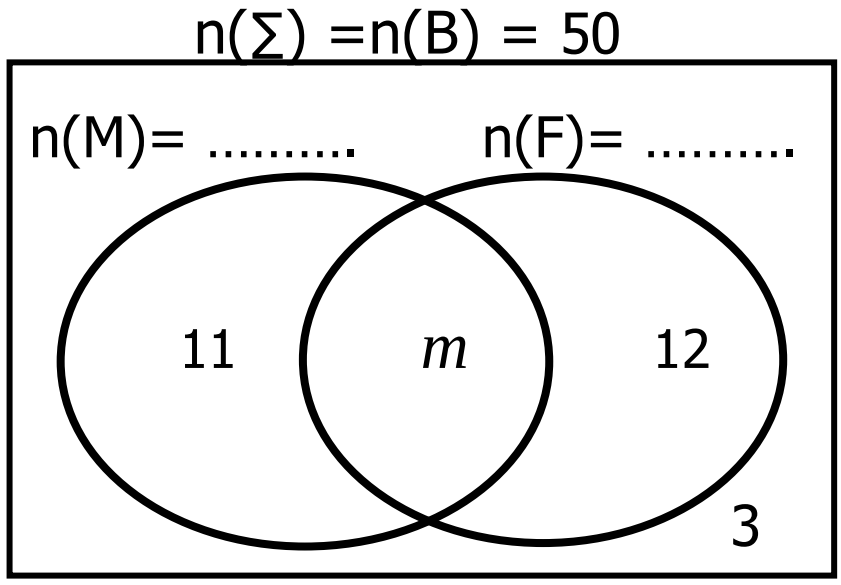
(a) If Nakalanzi was given a discount of 20% on her total expenditure. how much was the discount? (04 Marks)

(b) How much did Nakalanzi pay? (01 Mark)

25. A milk seller has 36 litres of milk. He sells milk using a container measuring, 6cm by 10cm by 4cm at sh.500 per full container. How much money does he get after selling the milk? (04 Marks)

26. In a class of 50 pupils, all of them eat beans (B), 11 pupil eat meat (M) but not fish (F), 12 pupils eat fish but not meat. m pupils eat all the three dishes and 3 pupils eat only beans.

(a) Complete the Venn diagram below using the above information. (02 Marks)



(b) How many pupils eat all the three dishes? (02 Marks)

(c) Find the probability that a pupil picked at random does not eat fish. (02 Marks)

27. Given the number 7654.3210,

(a) Find the quotient of the place values of 4 and 3. (02 Marks)

(b) Workout the sum of the value of 6 and the place value of 1. (02 Marks)

(c) Calculate the cube root of the place value of 7 in the above number. (02 Marks)

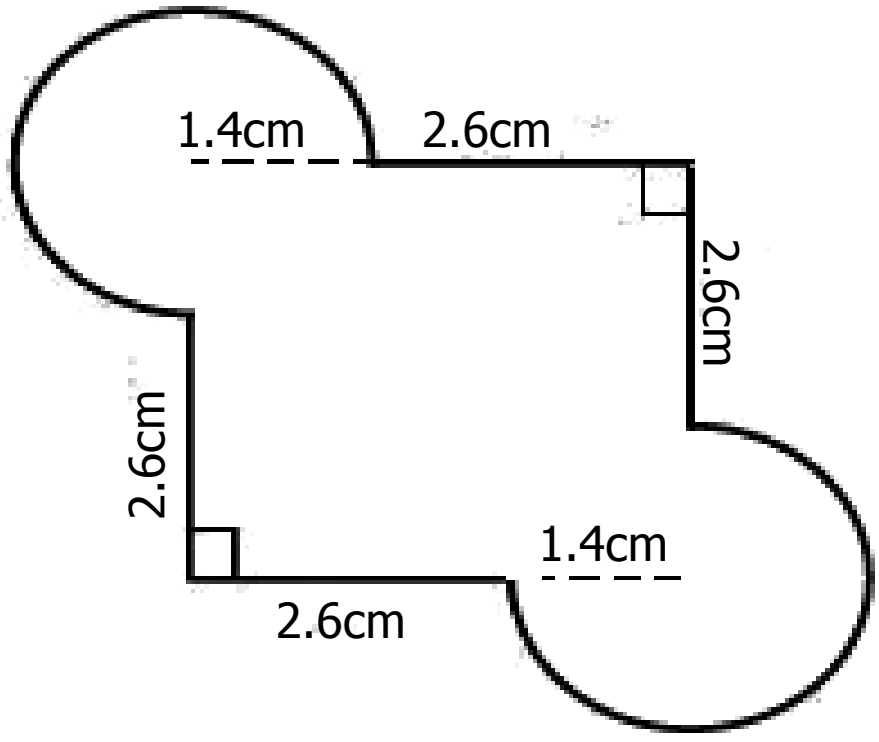
28. John and his young daughter travelled from Kampala to Nairobi by bus. John paid K.shs 1,500 and the daughter paid K.shs 750.
1 Kenya shillings (K.shs = 24 Uganda shillings)

(a) Workout the bus fare in Uganda shillings which each of them paid. (03 Marks)

(b) If John had Ugsh.100,000 at the beginning of the journey, what was his balance in Kenya shillings after paying bus fare for himself and the daughter? (02 Marks)

29. The figure below is of a plot of land with straight edges of length 2.6cm and arcs of circles of radii 1.4cm.

(Use $\pi = \frac{22}{7}$)



(a) Workout its area. (03 Marks)

(b) Calculate its perimeter. (02 Marks)

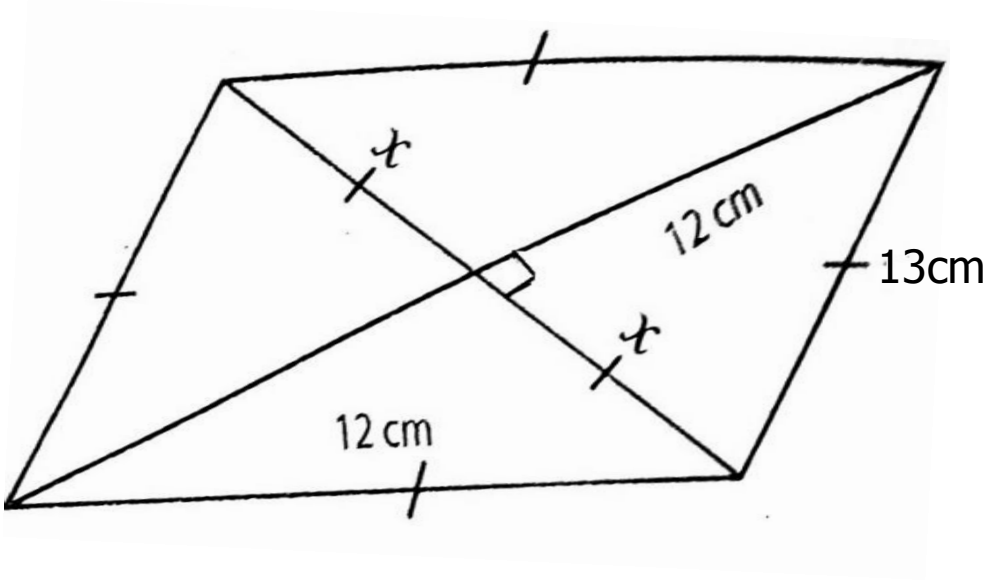
30. Peter and John walked from the same point O. Peter walked 50 metres Westwards to point P and John walked 50 metres Southwards to point Q.

(a) Sketch a diagram to show the above information. (01 Mark)

(b) Draw an accurate diagram to show the movement of the two boys. Use a scale of 1cm to represent 10 metres. (04 Marks)

(c) Measure the distance between P and Q and give your answer in metres. (02 Marks)

31. Study the rhombus below and use it to answer the Questions that follow.



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

(b) Calculate its area. (02 Marks)

32. (a) Convert 80,000cm^2 to m^2. (02 Marks)

(b) How many litres are in 8400 millitres? (02 Marks)

END