SUREKEY EXAMINATIONS BOARD

PRIMARY SEVEN PLE PREPARATION SET THREE

2024

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Index No.	EMIS No.						Personal No.		

Candidate's Name: .....

Candidate's Signature: .....

School Name: .....

District ID: | | | | |

Read the following instructions carefully:

1. Do not forget to write your **school** and **district name** 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 inside the question paper.

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. Simplify: 13 + 14 – 12

2. Workout: -8 + $^{+}5$

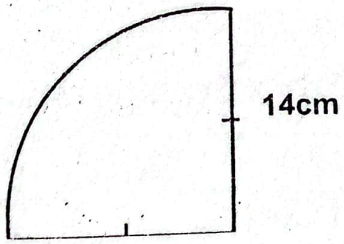
3. Given that set D ={q, e, i, w} and set K = {a, e, i, o, u}. How many elements make up the union of D and K?

4. Convert 34 millimetres to centimeters.

5. Solve: 14 – 2p = 4

6. Mubende public school will play a foot ball match with Kyegegwa Junior school. What is the probability that Mubende public school will win?

7. Workout the perimeter of the figure below. (use π as $\frac{22}{7}$)

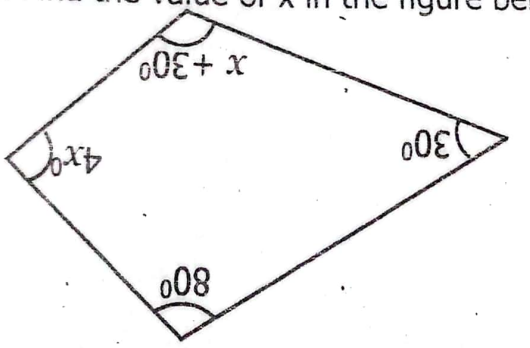


8. By selling a phone jacket at sh.7,000 a trader realizes a profit of sh.2,000. Calculate his percentage profit.

9. Workout: $110_{two} \times 11_{two}$

10. In a stationary shop, sh. 5,000 can buy 3 books. How much money can buy 9 books?

11. Find the value of x in the figure below.

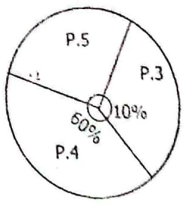


12. Find the median of $\frac{1}{3}$, $\frac{1}{8}$, $\frac{1}{4}$ and $\frac{1}{3}$

13. A woman was born in 46BC and died in21AD. How old was at the time of her death?

14. A tailor bought 10.5 metres of cloth. She cut the cloth into small pieces of Cloths did she cut out?

15. The pie – chart below shows the number of pupils in P.3, P.4 and P.5 at Trinity Primary school.



If P.4 and P.5 have 360 pupils
Altogether, how many pupils are in P.3?

16. Simplify $\frac{4^{-1} \times 4^{3}}{4^{2}}$

20. Workout the cube root of 216.

17. In what ratio must 32 mangoes be reduced to 28 mangoes?

SECTION B: 60 MARKS

Answer all questions in this section
Marks for each question are indicated in brackets.

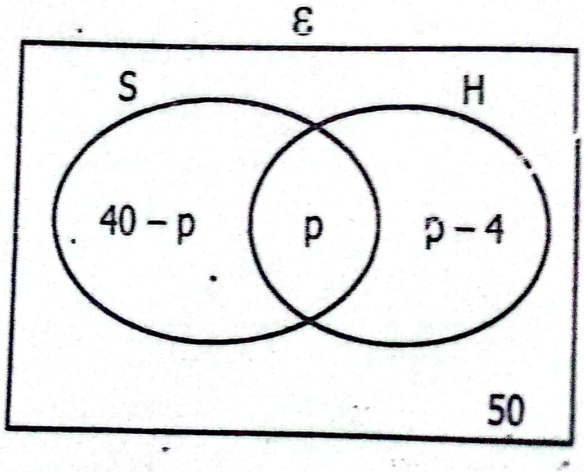
21. (a) Use distributive property to work out: $(137 \div 8) - (9 \div 8)$ (2mks)

18. Without carrying out actual division, prove that 553 is exactly divisible by 7.

b) Find the sum of $(4 \times \frac{1}{10})$ and $(9 \times \frac{1}{10})$ (03mks)

19. David uses 48 minutes to ride from his home to the workplace which is at a distance of 32 kilometres. Calculate in Km/h the speed at which he rides.

22. At Little Lijos Kindergarten, pupils play skipping (S), Hide and seek (H) and other games as shown in the venn diagram. The number of pupils playing Hide and seek is as much as those playing other games.



Find the number of pupils in the school.

23. The average weight of 11 footballs players is 70kg and the average weight of the players with their coach is 72kg. Calculate the weight of the team coach.

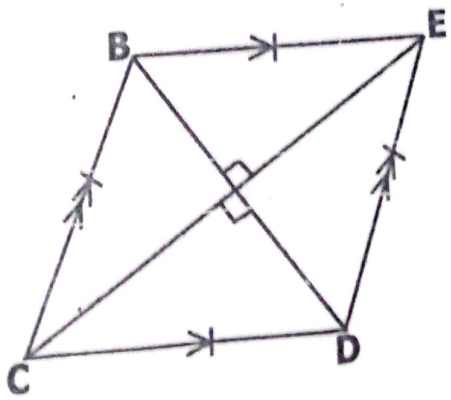
24. Company F pays its workers' allowances every after 14 days, while company G pays the workers' allowances after 16 days.

a) Find the minimum number of days taken by both companies to pay their workers' allowances at once. (03 mks)

b) On which day of the week do the two companies pay their workers at once? (02mks)

25. Tank A is ½ full of water and Tank B is ¾ full of water. If there are 20 more litres of water in Tank B than A, find in litres the amount. (04mks)

26. In the figure below, diagonal BD = 12cm and diagonal CE = 16cm. the two diagonals bisect each other.



a) Workout the area of the figure BCDE. (2mks)

b) Calculate the perimeter of the figure above. (04 marks)

27. The exchange rates for Kenya shillings (Ksh) to Uganda shillings (Ugsh) and united states Dollars (US$) to Uganda Shillings are shown below.

Ksh.1 = ugsh. 34

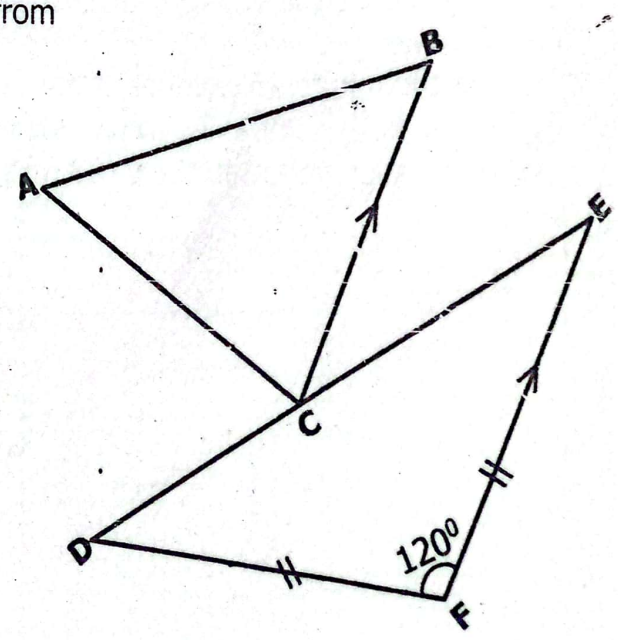
Us$ 1 = Ugsh. 3,800

a) How many Kenya shillings can one get from US$ 6,800? (03mks)

b) If the cost of a suitcase is US$.50, how much does it cost in Uganda shillings? (02mks)

28. Rashell is thrice Joan's age while Martha is 5 years older than Joan. In four years to come, Rashell and Joan will be twice as old as Martha. How old is Rashell?

29. In the diagram below, line BC is parallel to EF. Angel ACD is 10° more than angle ACB. EFD is an Isosceles triangle.



a) Workout the area of the figure BCDE. (2mks)

b) Calculate the perimeter of the figure above. (04 marks)

b) If the cost of a suitcase is US$.50, how much does it cost in Uganda shillings? (02mks)

28. Rashell is thrice Joan's age while Martha is 5 years older than Joan. In four years to come, Rashell and Joan will be twice as old as Martha. How old is Rashell?

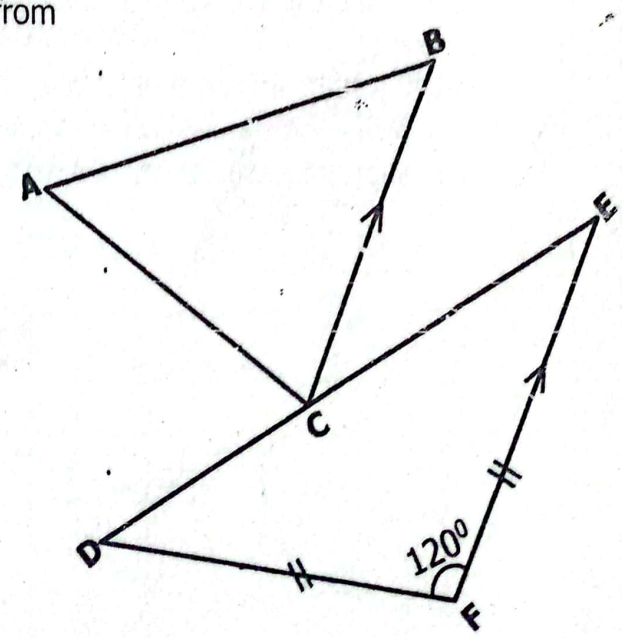
27. The exchange rates for Kenya shillings (Ksh) to Uganda shillings (Ugsh) and united states Dollars (US$) to Uganda Shillings are shown below.

Ksh.1 = ugsh. 34

Us$ 1 = Ugsh. 3,800

a) How many Kenya shillings can one get from US$ 6,800? (03mks)

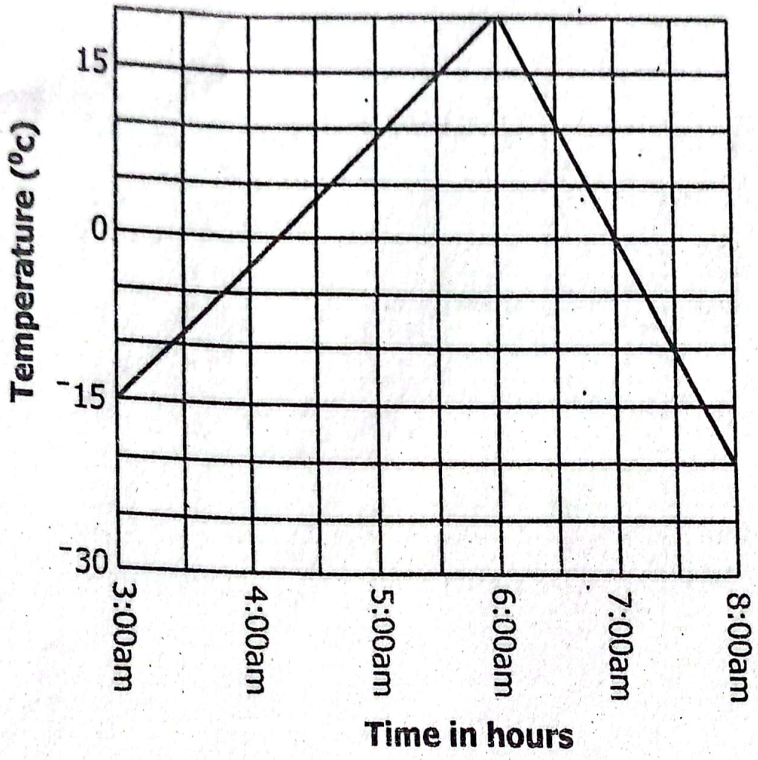
29. In the diagram below, line BC is parallel to EF. Angel ACD is 10° more than angle ACB. EFD is an Isosceles triangle.



a) Find the size of angle FEC. (2mks)

b) Calculate the size of the angle ACD.

30. The graph below shows the variations in the temperatures at the top of a mountain at different time intervals of the day. Study it carefully and then answer the questions that follow.



a) Write the scale of the graph on the vertical axis. (02mks)

b) What was the maximum temperature experienced on the top of the mountain? (1mk)

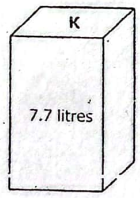
c) At what time was the temperature 15°C? (1mk)

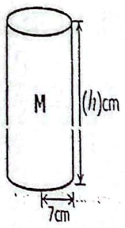
d) Calculate the temperature range. (2mks)

31. (a) Using a ruler, a pencil and a pair of compasses only, construct a triangle BAG where line BA = 6.5cm, angle GBA = 30° and angle GAB = 45°.

b) Drop a perpendicular from point G to meet line BA at W. (01 mk)

32. A rectangular milk tank K below contains 7.7litres of milk. All the milk is then collected in 5 small cylindrical containers M each of radius 7cm and unknown height (h)





Calculate the height of the small container M. (use π as $\frac{22}{7}$) (5mks)

THE END