VILLA ROAD PRIMARY SCHOOL&
NABBUNGA FOUNTAIN OF EDUCATION
PRE-MOCKJOINT EXAMINATION, 2023
PRIMARY SEVEN
MATHEMATICS

Time allowed: 2 Hours 30 Minutes

PM	
EM	

Index No. ⬚⬚⬚⬚⬚⬚⬚⬚⬚

Candidate's Name: ....

Candidate's Signature: ....

School Name: ....

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

Read the following instructions carefully:

1.   The paper has **two** sections: **A** and **B**

2.   Section **A** has 20 short-answer questions (40 marks)

3.   Section **B** has 12 questions (60 marks)

4.   Answer **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 alteration 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 EXAMINER'S USE ONLY		
Qn. No	**MARK**	**SIGN**
1 - 11		
12 - 18		
19 – 23		
24 – 25		
26 – 28		
29 – 28		
29 - 32		
TOTAL		

Turn over

1. Add: 0.3 + 0.2

2. Simplify: $(^-8) - (^-4)$

3. Find the value of 40tens and 2ones

4. Given that set A = {0, 2, 4, 6, 8} and set B = {1, 2, 3, 4, 5}, find n(A−B)

5. Find the numeral whose scientific notation is 6.45×10^{-2}

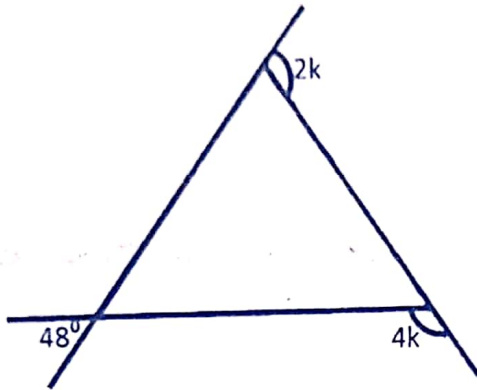6. Simplify: $2\frac{2}{9} \times \frac{2}{5}$

7. Work out: y + 4 = 1 (mod6)

8. An aeroplane takes 4 hours 15 minutes to travel from Entebbe to Mombasa. At what time should it leave Entebbe to reach Mombasa at 1:05p.m?

9. In an examination, 55% of the pupils scored above 70%. If 54 pupils scored below 70%, how many pupils scored above 70%?
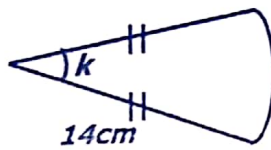
10. Solve for g: $10g^3 - 4 = 76$

11. Seven pens cost sh.35000. How many more pens will sh.65,000 buy?

12. Find the value of k in degrees in the figure below.

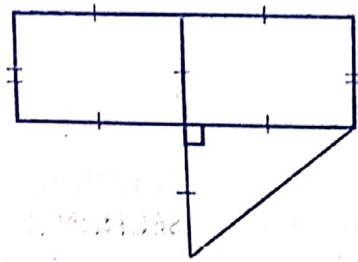13. Theperimeter of the sector is 36.8cm find k in degrees. (take $\pi = \frac{22}{7}$)

14. Using a ruler, a sharp pencil and a pair of compasses only, construct an angle of 165^0 in the space provided below.
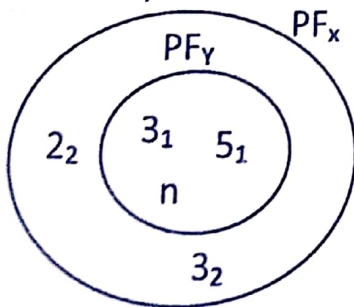
15. Round off 29.97 to one decimal place.

16. Factorize completely: $8y + 4y^2$

17. The diagram below shows a net of a triangular prism with two faces missing. Complete the net by drawing the two missing faces.

18. A worker's salary was increased from sh.240,000 to sh.280,000. In what ratio did the worker's salary increase?

19. The prime factors of x and y are represented in the diagram below. Use them to answer question that follows.
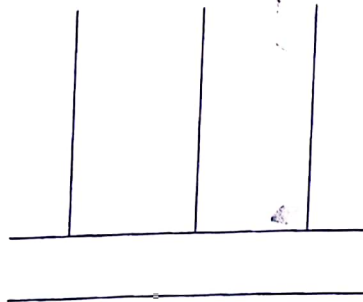

Given that the Highest Common Divisor (HCD) of and y is 30, find the value of x.

20. Nandutu turned clockwise through an angle of 225^0 and faced North East. In which direction was she facing?
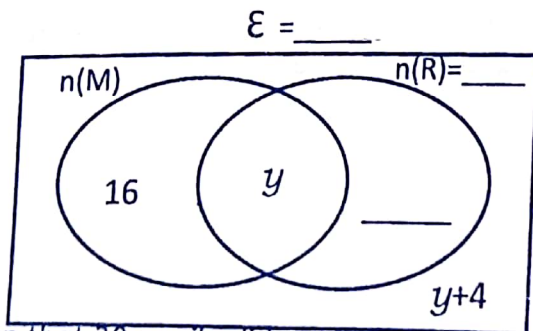
SECTION B:

21. a) Find the product of the value of 8 and the place value of 3 in 845.73. (3mks)

b) Show 123_{five} on an abacus below. (2mks)

22. At a party, $(y+15)$ pupils ate Rice (R); y pupils ate both Rice and Matooke (M), 16 pupils ate matooke only and $(y+4)$ pupils did not eat any of the two foods.
a) Complete the Venn diagram below. (3mks)

$\varepsilon =$_____

n(M)   n(R)=_____

16   y

        _____

$y+4$

b) Given that 30 pupils did not eat rice, find the value of y. (2mks)

23. A car traveling at 100km/hr takes 3 hours 36 minutes to travel from town A to town B.
    a) Find the distance from A to B. (2mks)

(3mks)

    b) If the driver starts his return journey from B at 2:00p.m, at what speed must he drives to reach town A at 6:00p.m.withoutstopping? (3mks)

24. Coloured poles were fixed round a circular school garden at intervals of 110cm from each other. if the red pole was in the 12th position from either side of a circular garden;
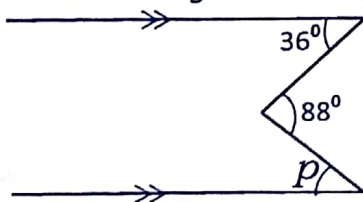
    a) Find the diameter of the garden (take $\pi = \frac{22}{7}$) (3mks)

    b) Calculate the area of the garden. (2mks)

ke (M), 16
ds.

25. a) Solve for k: $\dfrac{3}{k+2} = \dfrac{2}{2k-2}$ (2mks)

c) Solve and find the solution set for $-2p + 3 \le 9$ (3mks)

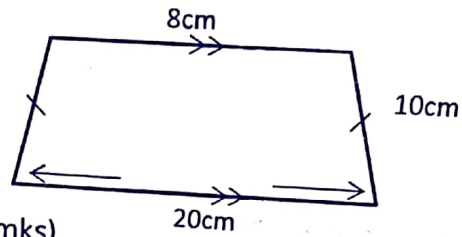26. a) Given the figure below, find the size of angle p in degrees. (2mks)
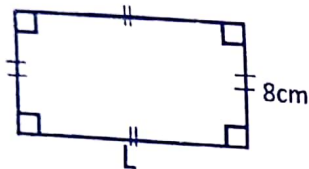

b) The size of each exterior angle of a regular polygon is $\dfrac{3}{5}$ less than its interior angle. Name the polygon. (4mks)

27. Ribbon M $(7y - 4)$cm long is three times as long as ribbon N which is $(y+8)$cm.
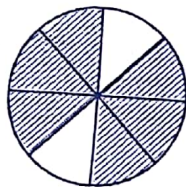   a) Find the length of ribbon N. (3mks)

b) Find the total length of the two ribbons. (2mks)

28. Below is a rectangle and an isosceles trapezium with the same area. Study them carefully and answer the following questions.

8cm

8cm

10cm

20cm

Find the Length (L) of the rectangle. (5mks)

29. The shaded part in the figure below shows the number of girls in the school. Use it to answer the questions that follow.

a) Find the percentage of boys in the school. (2mks)

b) If the school has 500 boys, find the total number of pupils in the school.

(2mks

30. a) Using a ruler, a sharp pencil and a pair of compasses only, construct a square PQRS of diagonals 8cm each. (3mks)
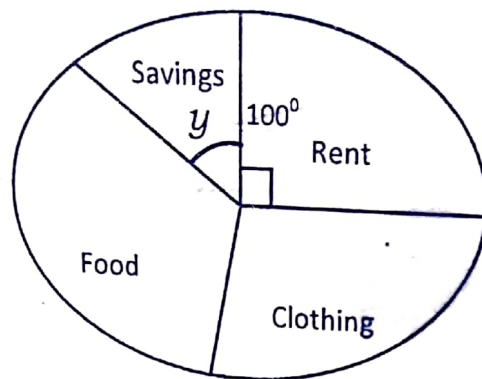
b) Measure line PQ (1mk)

31. The table below shows the buying and selling rates of different currencies in Uganda for a certain period of time at Crane Forex Bureau. Use it to answer the questions that follow.

Currency	Buying rate	Selling rate
US$ 1	Ugsh.3600	Ugsh.3650
£1	Ugsh.5100	Ugsh.5150
Ksh. 1	Ugsh.35	Ugsh.36

a) Odong went to the bureau to buy Ksh.4000 and US$650. How much money in Uganda shillings did he pay altogether? (3mks)

b) If Teddy had £90, how much money did she get in Kenya shillings? (3mks)

32. The circle graph below shows Mr. Makkula's monthly savings and expenditure of sh.720,000. Study it carefully and use it to answer the questionthat follow

Given that Mr. Makkula spends sh.220,000 on food every month, find the value of y

(4mks

***** END *****