ST.PETER'S PRIMARY SCHOOL NSAMBYA

PRIMARY LEAVING SPECIAL MOCK EXAMINATION

2023

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Index No.	EMIS No.						Personal No.		

Candidate's Name: ....

Candidate's Signature: ....

School Name: ....

District Name: ....

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.

allowed in the examination

FOR EXAMINERS' USE ONLY

Qn.No.	MARKS	EXR'S NO.
1 - 5		
6 - 10		
11 - 15		
16 - 20		
21 - 22		
23 - 24		
25 - 26		

SECTION A: 40 MARKS

Answer **all** questions in this Section

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

1. Workout:
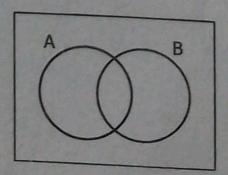$$\begin{array}{r} 2\ 3 \\ \times\ 3 \\ \hline \\ \hline \end{array}$$

2. Find the additive inverse of ‾2.

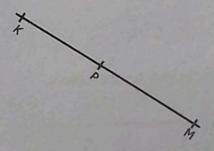3. Write CDXLII in Hindu Arabic numeral.

4. Work out: $\frac{2}{3} + \frac{1}{4}$

5. In the diagram below, shade $(A - B)'$

6. Subtract 2p − 4 from 3p − 7.

7. Draw an angle of 75° at point P using, a ruler, a pencil and a protractor.

8. The car covered 0.4km and it got a mechanical problem. The remaining distance to complete the journey was 48km. How long was the journey?
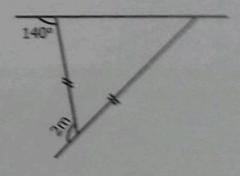
9. Round off 29.95 to the nearest tenths.

Turn Over

10. Find the sum of the next two numbers in the sequence:

216 , 125 , 64 , _____ , _____

11. The perimeter of the rectangle is 12m. If its width is half the length. Calculate the area of the rectangle.
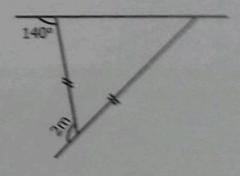
12. Calculate the value of m in the figure below.

13. Given that $PF_{18} = 2 \times 3^2$

$PF_{24} = 2^3 \times 3^1$

10. Find the sum of the next two numbers in the sequence:

$$216, \quad 125, \quad 64, \quad \underline{\hspace{1cm}}, \quad \underline{\hspace{1cm}}$$

11. The perimeter of the rectangle is 12m. If its width is half the length. Calculate the area of the rectangle.

12. Calculate the value of m in the figure below.

13. Given that $PF_{18} = 2 \times 3^2$
$$PF_{24} = 2^3 \times 3^1$$

18. Work out $12 \div 3$ using a number line.

19. If $p = -8$, $k = -5$, find the value of $\dfrac{4p - 5k}{p}$

20. Patience sold 24 litres of milk using a cup of 500ml. How many such cups did she sell?

18. Work out $12 \div 3$ using a number line.

19. If $p = -8$, $k = -5$, find the value of $\dfrac{4p - 5k}{p}$

20. Patience sold 24 litres of milk using a cup of 500ml. How many such cups did she sell?

☐

23. (a) Solve and state the solution set for n if; $-2n + 4 \leq 16$. (02

(b) Solve for k: $43_{ten} = 37_k$. (02

24. James travelled from Town A to Town B at a speed of 50km/hr for 2 ho
He then continued to Town C at a speed of 120km/hr for 30 minutes an
rested for 30 minutes at Town C.

(a) How far is Town C from Town A? (02 M

26. By using a ruler, a pencil and a pair of compasses only;

   (a) Construct a triangle PNY where $\angle PNY = 75°$, $\overline{NY} = 6.5cm$ and $\angle NYP = 60°$.

   (04 Marks)

   (b) Find the perimeter of the triangle PNY above.

   (02 Marks)
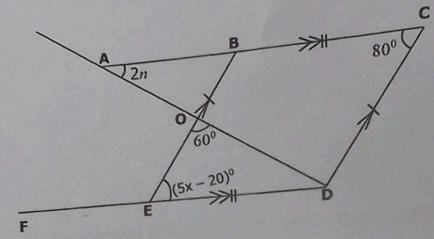
b) If he returned to Town A at a speed of 80km/hr, calculate his
average speed for the whole journey.   average speed ----- (03 Marks)

he interior and exterior angles of a regular polygon are in the ratio of 3:2
espectively.

a) Name the polygon.   (03 Marks)

Calculate its interior angle sum.   (02 Marks)

28. Frank spent $\frac{1}{3}$ of his salary on food, $\frac{1}{4}$ less than the remainder on rent, saved sh.120,000 for his son's school fees. How much does Frank earn as monthly salary?

(05 M

29. Tom is 15 years older than Sarah, in 6 years' time, Tom will be twice as old as Sarah.

    (a) How old is Sarah now?

(03 Mark
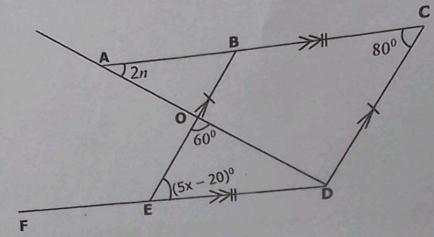
27. In the diagram below, line **ABC** is parallel to **FED**, **BE** is also parallel to **CD** and line **AD** intercepts line **EB** at point **O**.

(a) Find the value of **x**.

(02 Marks)

(b) Calculate the size of angle **BAO**.

(02 Marks)

27. In the diagram below, line **ABC** is parallel to **FED**, **BE** is also parallel to **CD** and line **AD** intercepts line **EB** at point **O**.
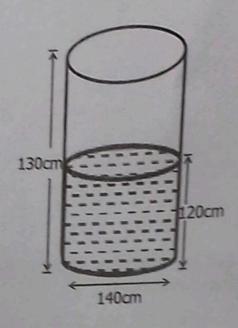

(a) Find the value of **x**.

(02 Marks)

(b) Calculate the size of angle **BAO**.

(02 Marks)

31. The milk can below holds milk to a height of 120cm as shown below.
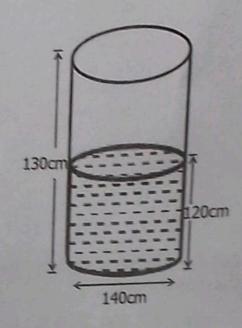

(a) How many litres of milk are in the can? (Use π as $\frac{22}{7}$)

(03 Marks)

(b) If John buys each litre of milk at sh.2000, how much money is needed for him to make the can completely full? (03 Marks)

31. The milk can below holds milk to a height of 120cm as shown below.

130cm
120cm
140cm

(a) How many litres of milk are in the can? $\qquad$ (Use π as $\frac{22}{7}$)

(03 Marks)

(b) If John buys each litre of milk at sh.2000, how much money is needed for him to make the can completely full? (03 Marks)