UNIQUE STAR EXAMINATIONS BOARD

PRE PRIMARY LEAVING EXAMINATION

2023

MATHEMATICS

Time allowed : 2 hours 30 minutes

Index No.	Random No.						Personal No.		

Candidate's name : .....

Candidate's signature : .....

School Random number : .....

District No. : | | | | |

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 papers** 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 the boxes inside the question paper.

FOR EXAMINER'S 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

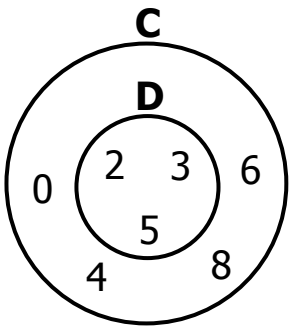
Question **1** to **20** carry two marks each

1. Work out: $24 \div 3$

2. Write in figures: Two hundred three thousand, seventy-two.

3. Solve for g: $6 - 3g < 18$

4. Study the Venn diagram below, and use it to answer the question that follows.



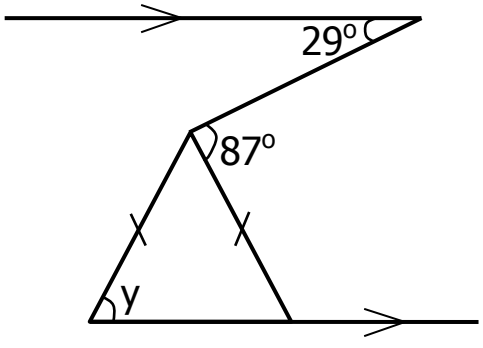
List all the proper subsets that can be formed from $C \cap D$

5. Find the sum of all prime numbers between 86 and 100.

6. A truck carries a maximum of 325 kilogrammes. How many tonnes does it carry?

7. Work out: $1 \div 4 =$ ___ (mod 5)

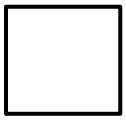
8. Find the size of the angle marked y in degrees.



Turn Over

9. Work out: $^{-}7 - {}^{+}8$

10. In Kaluba market, 6 mangoes are sold at sh. 1500. How much money would one pay for 18 similar mangoes?

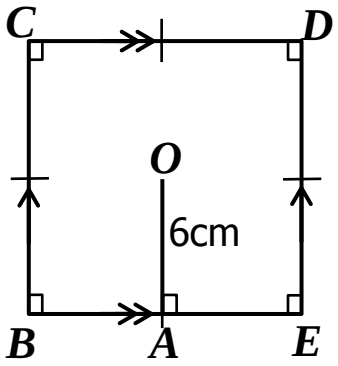


11. Simplify: $2\frac{3}{7} + \frac{5}{14}$

12. A clock face shows 7 minutes to 12:00noon but the clock gains time by 9 minutes. What is the exact time?

13. Solve for x: $2^{x} \times 8 = 1$

14. In the figure below, O is the centre and line OA is perpendicular to line BE.



Find the area of the figure.

15. Aleni weighs 52kg. Blair weighs 41 kg and Boninto weighs 19kg heavier than Blair. Find their mean weight.

16. Subtract 2k + 6 from 3k – 8

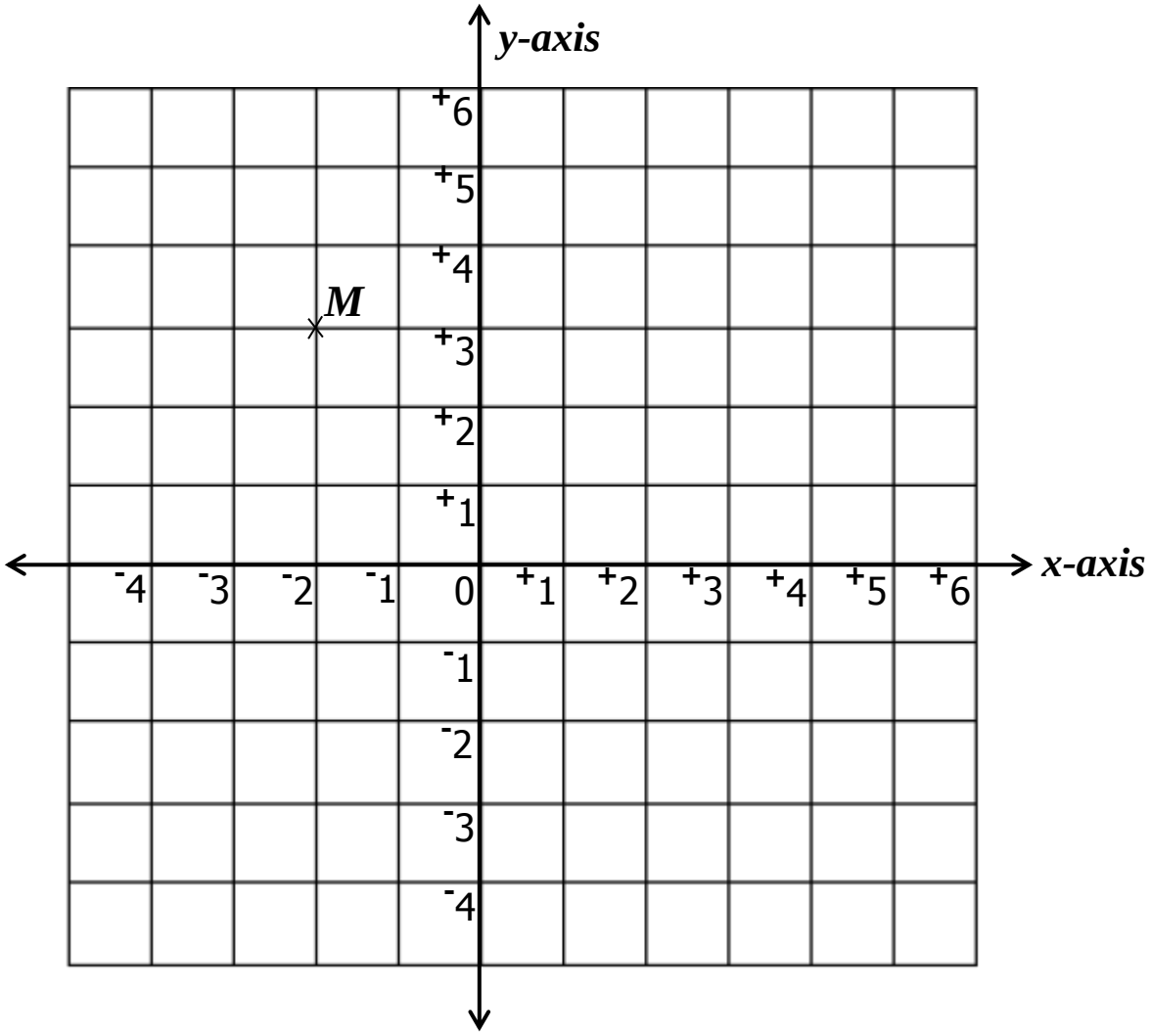
17. Find the square root of 2.56

18. Genius bought an article and sold it at sh. 24,000. If she made a loss of sh. 1000, calculate her percentage loss.

19. Find the angle that is $\frac{2}{7}$ of its supplement.

20. Use the co-ordinate graph below to answer questions that follow.

a) Locate point A where A(0, 4)



b) State the co-ordinates of point M

M.....

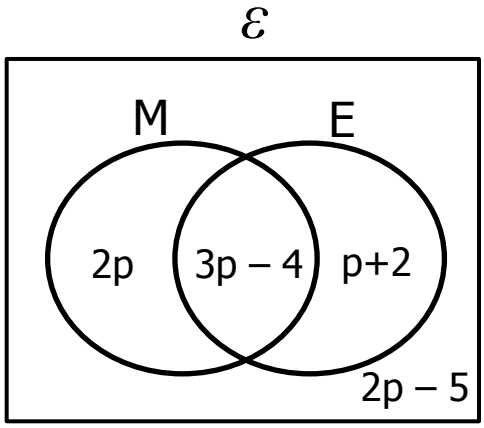
Turn Over

SECTION B: 60 MARKS

Answer **all** questions in this section

Marks for each question are indicated in brackets

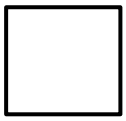
21. The Venn diagram below shows the number of P.7 pupils who like Mathematics (M), English (E), both and neither of the two subjects. Use it to answer questions that follow.



(a) Given that 14 pupils like more than one subject. Find the value of p *(02 marks)*

(b) Find the probability of picking a pupil at random who likes either Mathematics or English. *(03 marks)*

22. The least number that can be divided by either 20 or n leaving 10 as a remainder is 190. The greatest common factor (GCF) of the two numbers 20 and n is 5. Find the value of n *(04 marks)*



23. (a) Round off 62.496 to the nearest hundredth. *(02 marks)*

(b) Given that $\frac{0.5 \times y}{6.2 - 2.2} = 2.5$

Find the value of y. *(03 marks)*

24. The Exterior angle of a regular polygon is 4 times less than its interior angle.

(a) Name the polygon. *(03 marks)*

(b) How many right angles does the polygon has? *(02 marks)*

25. Benjamin can dig a plot of land in 1 hour. Eddy and Benjamin working together can dig the same plot in 20 minutes. The total area of the plot is 180 square metres.

How many more square metres can Eddy dig than Benjamin in 18 minutes? *(05 marks)*

26. The rates at which Martin's Forex Bureau (MFB) buys and sells different currencies are given in the table below. Use it to answer questions that follow.

CURRENCY	BUYING RATE	SELLING RATE
1 US dollar ($1)	Ugsh 3700	Ugsh 3800
1 pound sterling (£1)	Ugsh 4800	Ugsh 5000
1 Kenya shillings (Ksh.1)	Ugsh 36.0	Ugsh 39.0

(a) If Mr. Kazibwe has $360 and £950. How much money in Uganda shillings will he get from the forest bureau?

(03 marks)

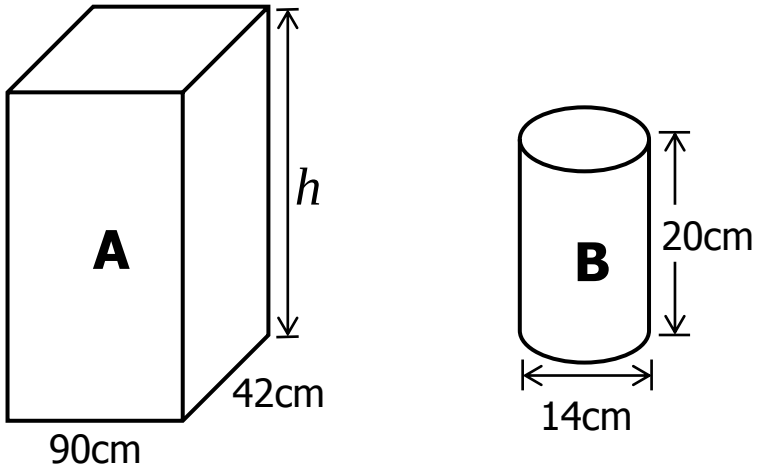
b) Given that Ozil has £1950, how much money in Kenya shillings can he get from the forex bureau? *(02 marks)*

Turn Over

27. (a) With the help of pencil, a ruler and a pair of compasses only, construct a quadrilateral MATH where line MA = 9cm, diagonal MT = 13cm, diagonal AH = 8cm and AT//MH. *(04 marks)*

(b) Measure the length of line AT. *(01 mark)*

28. Small cylindrical tins of size B are to be packed horizontally into the big box A as shown below.

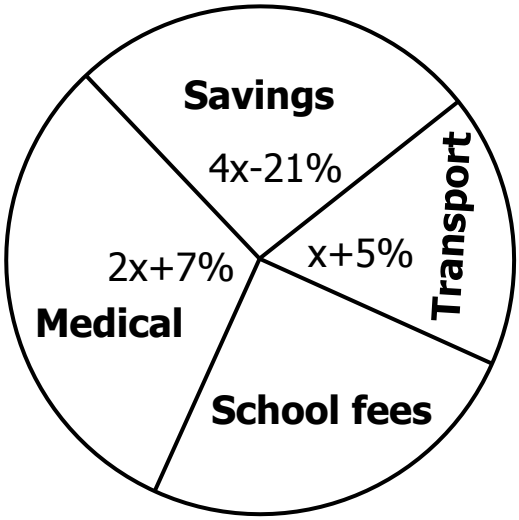


(a) Given that by packing cylindrical tins of size B into the big box, make a maximum 5 layers. Find the height of the box.
(02 marks)

(b) Calculate the volume of the space left after packing the first 3 layers of the big box. *(04 marks)*

Turn Over

29. The pie-chart below shows Newton's plan of his monthly salary. He plans to use $\frac{1}{4}$ of his salary on school fees. Study it carefully and use it to answer the questions that follow.



a) Find the value of x *(03 marks)*

b) If he is planning to spend sh. 240,000 on school fees, how much money does he earn? *(02 marks)*

30. The length of the sides of an acute angled triangle are in the ratio of 5:6:5 respectively. Its height is 16cm.

Calculate its area in cm^2. *(05 marks)*

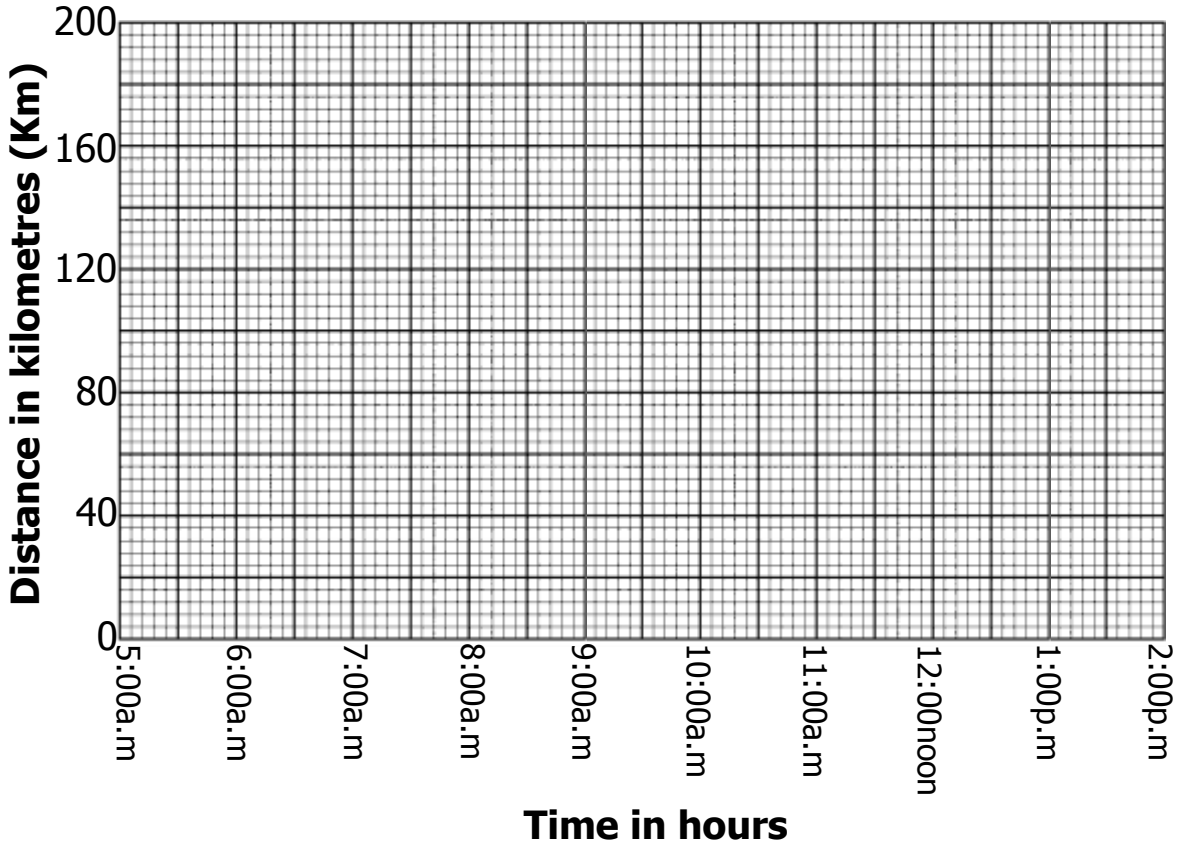
31. A mother is 30 years older than her twins. In 6 years time, the sum of the mother's age and a third of the twins' age will be 64 years.

How old is the mother now? *(04 marks)*

32. Travor travelled from town A to town C via town B. He started his journey at 5:30a.m travelling at an average speed of 50km/h for 2 hours to town B. He rested for 30 minutes and continued to town C at a speed of 60km/h for 1 hour. After resting for half an hour at town C, he drove back directly to town A at an average speed of 80km/h.

(a) Show the journey covered by Travor on the grid below.

(04 marks)



(b) Calculate his average speed for the whole journey.

(02 marks)

END