SMART STAR EXAMINATIONS BOARD

BEGINNING OF TERM 1 EXAMINATION – 2024

PRIMARY SEVEN

MATHEMATICS

Time allowed : 2 hours 30 minutes

Pupil`s Name .....

School Name.....

District Name.....

Read the following instructions carefully;

1. This paper has **two** sections: **A** and **B**. Section **A** has **20** questions and section **B** has **12** questions.

2. All the working for both sections **A** and **B** must be shown in the spaces provided.

3. All working must be done using a **blue** or **black** ball-point pen or fountain pen. Any work done in pencil other than graphs, pictures and diagrams will **not** be marked.

4. **No calculators** are allowed in the examination room.

5. Unnecessary changes of work may lead to **loss** of marks.

6. Any handwriting that cannot easily be read may lead to **loss of marks.**

7. Do **not** fill anything in the boxes indicated: **"For Examiners' Use Only"** and boxes inside the question paper.

FOR EXAMINERS' USE ONLY		
QN. NO.	MARK	EXR`S NO.
1 - 10		
11 - 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. Work out: 85 - 23

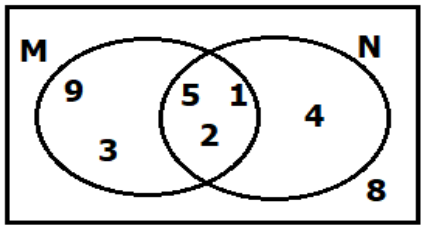
2. Write 9,003 in words.

……

……

3. Simplify: 6m + 4n – m -2n

4. Use the Venn diagram below to find the ∩ (M ∩ N)



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

6. A bus covered a distance of 90km in $1\frac{1}{2}$hours.Calculate its speed.

7. Find the Lowest Common Factor (LCF) of 8 and 24.

8. Receipts numbered consecutively from 039 to 338 were issued out to different parents by the school bursar. If each receipt was worth sh.5000, how much money did the bursar collect?

9. Given that  represent 10balls. How many balls are represented by  ?

10. Given the exchange rates below

US$1=Ugsh.3600

K.sh1=Ugsh.28

Convert 700US$ into Kenya shillings

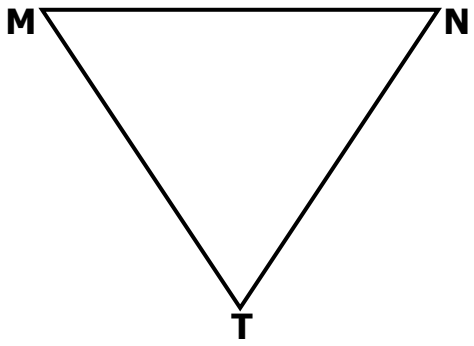
11. Change $12m^2$ to cm^2

Turn Over

12. Find the value of m in the sequence below.

1, 4, 9, 16, 25, m + 10.

13. Using a ruler, a pencil and a pair of compasses bisect angle **MTN**



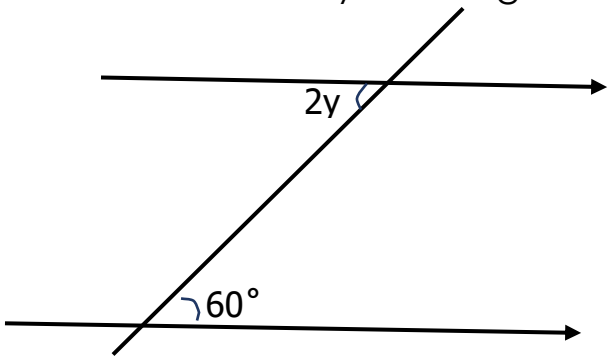
14.Solve for n: 2n + 3 = 15

15. Express 144km/h as m/sec

16.Decrease 450 tonnes of maize in the ratio if 4:5

17.Work out: 4 - 5 = _____(mod 6)

18. Find the value of y in the figure below.



19. Round off 7493 to the nearest hundreds.

20. Find the circumference of a circle whose diameter is 28dm.

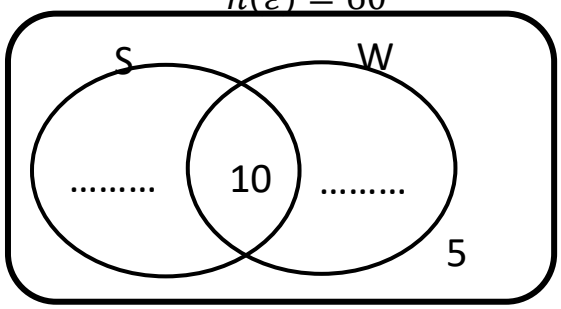
SECTION B (60MARKS)

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

21.At a birthday party attended by 60guests, 30 guests took soda(s), m guests took water(w) only, 10 guests took both water and soda while 5 guests did not take any of the two drinks.

a) Complete the Venn diagram **(2 marks)**

$n(\varepsilon) = 60$



Turn Over

b) How many guests took water? **(3marks)**

22. Simplify: $\frac{0.36 \times 0.21}{0.09 \times 0.7}$ **(3marks)**

b) Convert 0.333…into simplified common fraction. **(2marks)**

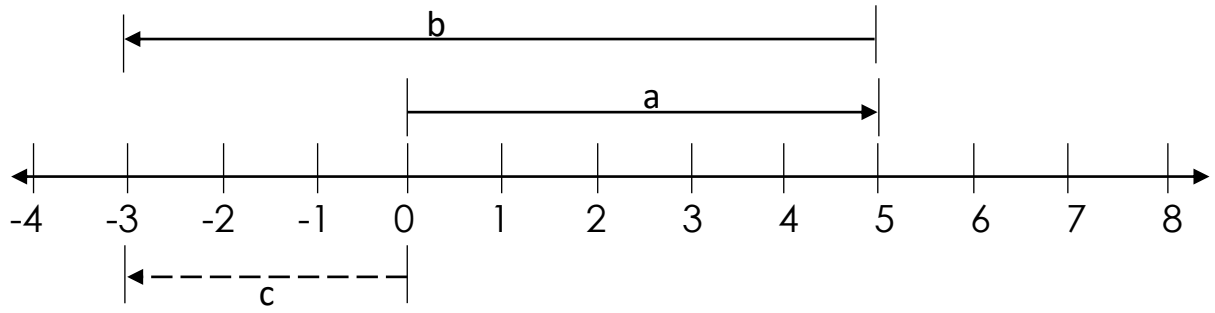
23. Musamali bought the items shown in the table below from a shop.

ITEM	**PRICE**	**AMOUNT**
……bars of soap	Sh2200 per bar	Sh6600
2loaves of bread	Sh……per loaf	Sh3400
2½kg of salt	Sh800 per kg	Sh……
TOTAL EXPENDITURE		Sh……

a) Complete the table below(4marks)

b) If Musamali paid sh10800, what percentage discount was she given?(2marks)

24. Use the number line below to answer the questions that follow



a) Identify the integer represented by the arrows: **(3marks)**

a=…… b=…… c =……

b) Write down the mathematical statement shown on the above number line. **(2marks)**

……

Turn Over

25. Two bells at HILLSIDE P/S ring at intervals of 30minites and 40minutes respectively.

If they first rung together at 10:00am.

a) After how many hours will they ring together?
(3marks)

b) At what time will they ring together again?
(2marks)

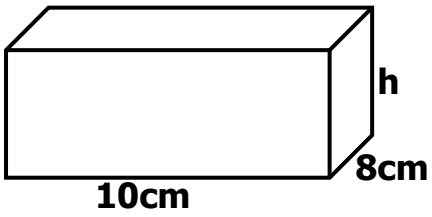
26.a) Given the digits 4, 8, 0 and 3
a) Find the difference between the largest and the smallest 4-digit numbers that can be formed from the above digits. **(3marks)**

b) Express 126 in Roman numerals. **(2 marks)**

27. Using a ruler, a pencil and a pair of compasses only, construct a triangle MAP where line MA = 8cm, angle MAP = 60˚and angle PMA = 30˚.
(4marks)

b) Measure line segement AP = _____cm **(1mark)**

28. The figure below is a rectangular prism of volume 480cm³ .Use it to answer the question about it.



a) Find the height (h) of the prism. **(3marks)**

Turn Over

b) Work out its total surface area. **(2marks)**

29.a)Find the value of p. $3^{p} \div 9 = 1$ **(2marks)**

b) Work out: $(6.5 \times 72) + (28 \times 6.5)$using distributive property.
(2marks)

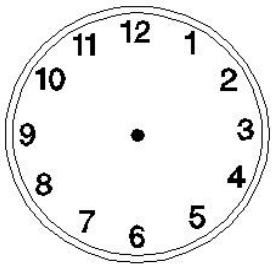
30.a) Solve for n: $2(2n - 2) = 16$
(3marks)

b) In Nakawa market, a cock cost thrice as much as a hen. The difference between their costs is sh.20,000. Find the cost of a hen. **(2marks)**

31. Copy and complete the table below. **(3marks)**

Distance (D)	Time (T)	Speed (S)
210km	3hrs	.....
.....	6hrs	70km/h
120km	.....	40km/h

b) Show 1730 hours on the 12 hour-clock face below. **(2marks)**



32. The table below shows marks scored by some pupils of Primary Six in a mathematics test.

Number of pupils	3	2	4	1
Marks	60	50	70	80

a) How many pupils sat for the test? **(1mark)**

Turn Over

b) What was the modal mark? **(1mark)**

c) How many pupils scored below the average marks?
(3marks)

END