

# SUREKEY EXAMINATIONS BOARD PRIMARY SIX END OF TERM I EXAMINATIONS 2022

#### **MATHEMATICS**

#### Time Allowed: 2 hours 30 minutes

Admission No.				Per	rsonal	No.		

Student's Name:	
Student's Signature:	
School Name:	
District Name:	

## Read the following instructions carefully:

- 1. Do not write your **school** or **district name** anywhere on this paper.
- This paper has two sections: A and B. Section A has 20 questions and Section B has 12 questions. The paper has 12 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

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					

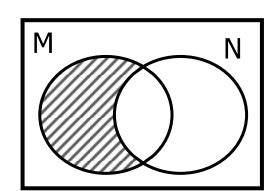
# **SECTION A: 40 MARKS**

Answer **all** questions in this Section Questions 1 to **20** carry two marks each

1. Add: 106 + 32.

2. Convert 500cm to metres.

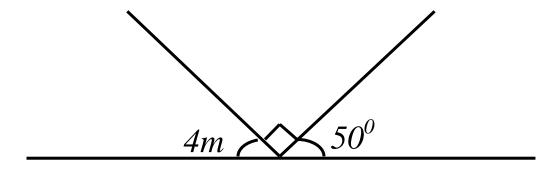
3. Describe the shaded region in the Venn diagram below.



4. 4 text books cost sh.24,000. Find the cost of 8 similar text books.

5. Expand 6204 using powers.

6. Find the value of angle m.



7. When marking a test, a teacher awards 3 marks every correct answer and deducts 2 marks for every wrong answer given. Sandra was given 10 questions to answer and passed 6 questions. How many marks did she get?

8. Subtract <u>2</u> from <u>4</u>. 3

9. Using a ruler, a pencil and a pair of compasses only, construct an angle of  $30^{\circ}$  in the space below.

10. Round off 4789 to the nearest hundreds.



11. Express  $3432_{\text{five}}$  to base ten.

12. The table below shows results for P.6 pupils at Apex P/S in a test.

Marks	20	85	90	95
No. of learners		丰	<b>=</b>	

Calculate the average score.

13. Simplify, 4m + 6n - m + n.

14. Find the smallest number that can be divided by 4 and 3 and leave no remainder.

15. Given, -4, 3, -1, 0 and 2. Arrange in ascending order. 16. Find the next number in the sequence below; 1, 3, 6, 10, 15, 28, ..... 17. Solve: 3y = 6. Workout: Weeks Days 18. 3 19. There are 4 black pens and 6 red ones in a box. Find the probability of picking a black pen from the box.

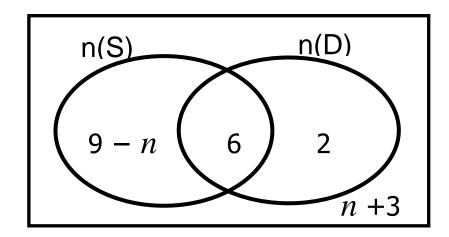
20. Write 13013 in words.

### **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 pupils who like singing (S) and others dancing (D). the rest like neither of the two.



(a) If 7 pupils like neither singing nor dancing, find the value of n. (02 Marks)

(b) How many pupils don't like dancing? (02 Marks)

- 22. Given the numbers 6721.358,
  - (a) Write the place value of each of the digits in the above number.

    (02 Marks)

(b) Write the above number in words. (01 Mark)

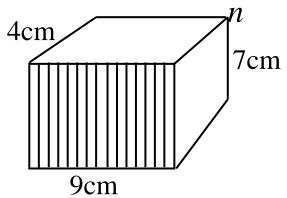
	(c)	Find the sum of the place value of 6 and the value of 5.	(03 Marks)
23.	Abel is	s 4 years older than Monica. How old is Monica if their total age is 20 years?	(03 Marks)
	(b)	How old was Abel 3 years ago?	(02 Marks)
24.	(a)	Work out (0.09) x (0.4) ÷ (0.06)	(03 Marks)
	(b)	Express the 0.25 as a fraction in its simplest terms.	(03 Marks)

25.	Benita rested after covering two fifth of her journey and was left with
	21km,

(a) How far was Benita's journey? (03 marks)

(b) How many meters had she covered? (03 marks)

26. The figure below is of a cuboid. Study it carefully and answer the questions about it.



- (a) What name is given to part n on the cuboid above? (01 Mark)
- (b) Find the area of the shaded part on the above cuboid. (02 Marks)

(c) Calculate its volume. (02 Marks)

27.	Given digits 4, 2 and 6						
	(a)	List down all possible 3-digits numbers that can be form	ned. (03 Marks)				
	(b)	Find the range of the numbers formed.	(01 Mark)				
28.	(a)	Using a ruler, a pencil and a pair of compasses only, contriangle NUP where $\sqrt{N} = 60^{\circ}$ length NU = 6cm and $\sqrt{U}$	nstruct = 45 <sup>0</sup> . (05 Marks)				
	(b)	Measure length UPcm.	(01 Mark)				

29.	During the lockdown period, Rose went for shopping and bought the following items					
		4kg of sugar at sh.12,000. 2 litres of cooking oil at sh.11,000. 3 bars of soap.				
	(a)	How much did she pay for sugar and cooking oil altoget	ther? (02 Marks			
	(b)	If Rose paid sh. 32,000 for all the items, how much did for each bar of soap?	she pay (02 Marks			
30.	sh.25 with 5	w is a Pick-up driver. His pick-up carries a trip of 1200 br,000. A lady built her house with 18460 bricks and a Kitcl 5540 bricks. How much money did the lady spend to tran e bricks she used?	nen			

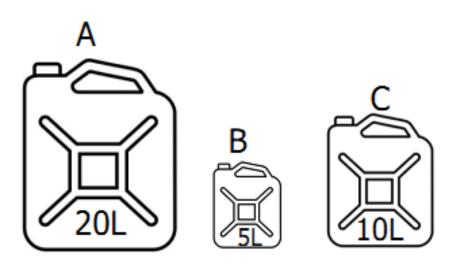
- 31.
- (a) Workout:  $133_{\text{five}}$  $-42_{\text{five}}$

(02 Marks)

(b) The table below shows addition in base two. Study it carefully and complete it correctly. (03 Marks)

+	0	1	2
0	0	1	
1		10	11
2	10		10

Below are three jerrycans that hold different litres of juice use them to answer questions that follow.



(a) How many jerrycans of size **B** can fill 2 jerrycans of size **A**? (02 Marks)

(b)	If each litre of juice in jerrycan <b>C</b> is sold at shs.500, how money would you get from selling the full jerrycan?	

12 END