

STRAIGHT LINE EXAMINATIONS BOARD

PRE - MOCK EXAMINATIONS, 2022

MATHEMATICS

Time allowed: 2 hours 30 minutes

Index No.:

--	--	--	--	--	--	--	--	--	--

Candidate's Name:

Candidate's Signature:

School Name:

READ THE FOLLOWING INSTRUCTIONS CAREFULLY.

1. This paper is made up of sections **A** and **B**.
2. Answer **ALL** questions. All answers to both section **A** and **B** must be in the space provided.
3. **All** answers **must** be written in blue or black ball - point pen or fountain pen.
4. Unnecessary crossing of work may lead to **loss** of marks.
5. Any handwriting that cannot be easily read may lead to **loss** of marks.
6. Do not fill anything in the boxes indicated "For Examiners' Use only" and those inside the question paper.

FOR EXAMINERS' USE ONLY		
Qn. No.	MARKS	EXRS' NO.
1-6		
7-12		
13-18		
19-21		
22-23		
24-25		
26-28		
29-30		
31-32		
Total		

SECTION A (40 MARKS)

Answer all the questions in this section

Questions 1 to 20 carry two marks each

1. Divide: 36 by 3.

2. Round off 29.99 to the nearest tenths.

3. Using a ruler, pencil and a pair of compasses only, construct an angle of 30° .

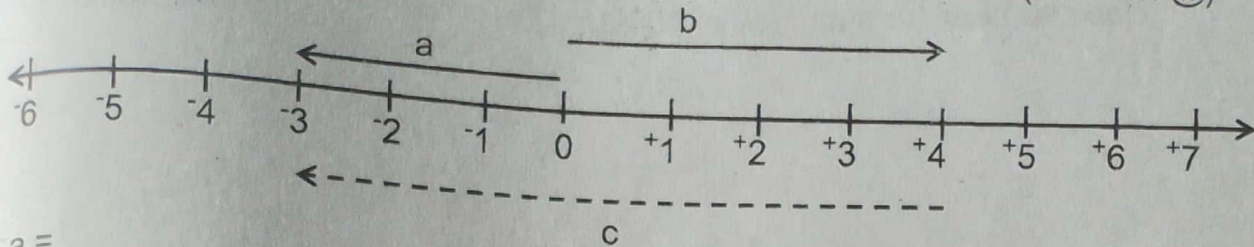
4. Workout: $2 - \frac{2}{3}$

5. Find the square of 0.09.

6. What is the next two numbers in the sequence:
1, 4, 9, 16, _____, _____

7. Simplify: $8 + 8 \div 8$

30. (a) Use the number line below to find the value of the letter. (01 mark @)



a = _____
 b = _____
 c = _____

(b) Write the mathematical sentence represented above. (01 marks)

31. (a) Study and complete the table below: (01 mark @)

ITEMS	QUALITY	UNIT COST	AMOUNT
Tea leaves	1 ½ of tea leaves	Sh. _____	Sh. 900
Posho	2 kg of posho	Sh. 3,400	Sh. _____
Soap	_____ bars of soap	Sh. 1,800	Sh. 5,850
Salt	750gms of salt	Sh. 2,00 per kg	Sh. _____
		Total	Sh. _____

(b) If Amina was given Sh. 1,450 as change after paying for all the items, what did she have at first? (01 mark)

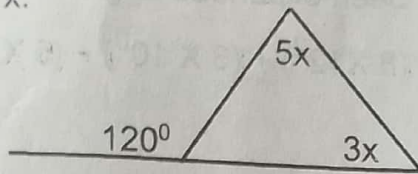
32. (a) Peter's car uses 15 litres of petrol to cover 75km. How much petrol does he need for a journey of 1050km? (02 marks)

(b) If a litre of petrol costs Sh. 3,400. How much money will be spent on petrol needed to run a car for $1\frac{1}{2}$ hours at a speed of 60km/hr?

(3 marks)

*** END ***

8. In the figure, find the value of x .



9. Write 3985 in scientific notation.

10. Express 25cm as a percentage of 5m.

11. Write 109 in Roman numerals.

12. Express 12:25pm in a 24 hour clock system.

13. Simplify: $2 - 3(p - 2)$

14. Central Primary School will have a netball match with Mantle P/S next week, what is the probability that Central P/S will win the match?

15. Solve: $1 - 3 = w$ (finite 5)

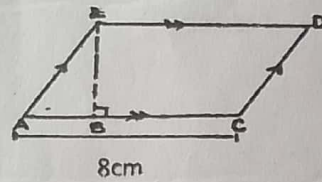
16. Calculate the number of elements in the set with 16 subsets.

17. Use distribution property to workout
 $(57.4 \times 6) + (42.6 \times 6)$

20. Write a single number that has been expanded to give.

$$(8 \times 12^2) + (3 \times 10^0) + (5 \times 10^{-2})$$

18. The area of a parallelogram below is 48cm^2 . Use it to find the length BE



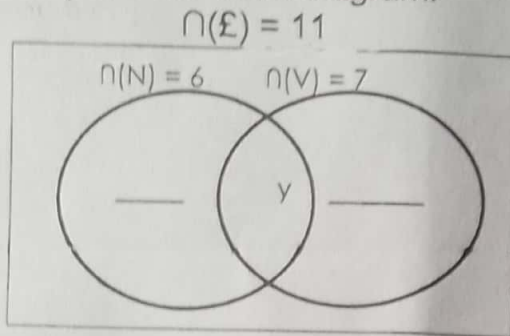
19. John is standing in a line so that he is the 9th boy from either sides of the line. How many boys are in the line?

(b) Workout the sum or prime numbers between 80 and 90. (2 marks)

26. In a family of 11 members, 7 play volleyball, 6 play netball, some members play both games while one person plays none of the two games.

(a) Complete the Venn diagram.

(03 marks)



(b) Find the value of y .

(02 marks)

(c) Workout the probability of picking a member of the family who plays only one game.

(2 marks)

27. A bus travelling at 80km/hr took 2 hours 30 minutes to cover part of the journey, the rest of the journey was covered in $1\frac{1}{2}$ hrs at the speed of 120km per hour.

(a) What distance did the bus cover altogether?

(03 marks)

(b) Workout the average speed for the whole journey. (2 marks)

28. A girl is 20 years younger than her sister. In 15 years' time, sister will be twice as old as the girl. Workout the age of each person now. (04 marks)

29. (a) Find the principal that can yield Sh. 7,200 in a bank that gives an interest rate of 20% per year in a period of 6 months. (02 marks)

(b) Calculate the amount of money that will be in that account by the end of the period of 6 months. (1 marks)