



THE PRIME EXAMINATIONS 2022

P.7 PRE - PLE TRIAL SET III

MATHEMATICS (Abridged Curriculum)

Time allowed 2 hours 30 minute.

INDEX NO:	Random No.	Personal No.



Candidate's Name:.....

Candidate's Signature:.....

School Random No.

District ID:

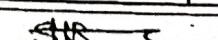
READ THE FOLLOWING INSTRUCTIONS CAREFULLY

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.
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 those boxes inside the question paper.

PUBLISHERS OF:-

THE PRIME: SCHEMING FRAME WORKS/PUPILS' WORKBOOKS, LESSON COURSE BOOKS,
HOLIDAY PACKAGES, LEARNING GAMES AND MORE...

FOR EXAMINERS' USE ONLY		
QUESTION NUMBER	MARKS ATTAINED	INITIALS
1 - 5		
6 - 10		
11 - 15		
16 - 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
TOTAL		



APPROVED:

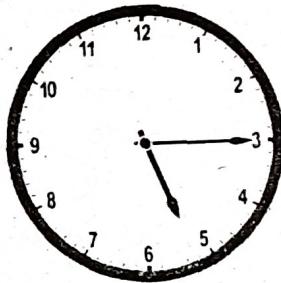
Consultant

Mathematics Department (PEC)

Section A (40 Marks)

1	Workout: 203×2	2	Write "nine hundred two thousand forty" in figures.
3	Today is Wednesday, what day of the week was it 67 days ago?	4	Find the next number in the sequence below. 43, 42, 39, 33, 23, _____
5	Solve: $\frac{3n}{3} - 1 = 5$	6	How many elements are in a set with 31 proper subsets?
7	Expand 85.37 using exponents.		
8	Akulo bought a dozen of facemasks at sh. 5000. She later sold each facemask at sh.550. Calculate the profit she made.	9	Express 400cm^2 as square metres.

- 10 Change the evening time shown on the clock face below to 24 hour clock.



11 Work out: $3\frac{1}{4} \div 1\frac{3}{4}$

- 12 What value does 7 represent in the numeral 90743?

13 If a number is chosen at random from a set of numbers 1 to 10, what is the probability that a number chosen is a square number?

- 14 The bearing of town N from town M is 320° . What is the bearing of town M from N?

15 Given that: $b = 5d + 6$ and $d = 3$. Find the value of b.

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

17 Samson stood in a straight line of boys on a health parade. He was the 9th from one side and the 16th from the other side. How many boys were on the parade?

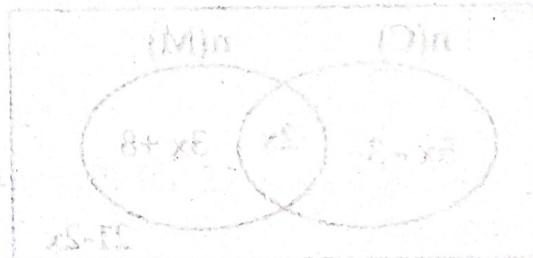
18 Roselinda takes 15 hours to slash a compound. Jacob takes 10 hours to slash the same compound. How long will it take for the two workers to slash the same compound if they work together?

19 In a class of 43 pupils, 19 of them are boys and the rest are girls. Draw tallies to represent the number of girls in the class.

20 Find the G.C.F of 48 and 54.

Section B (60 Marks)

- 21 (a) Work out: $321_{\text{five}} - 43_{\text{five}}$ (02marks)



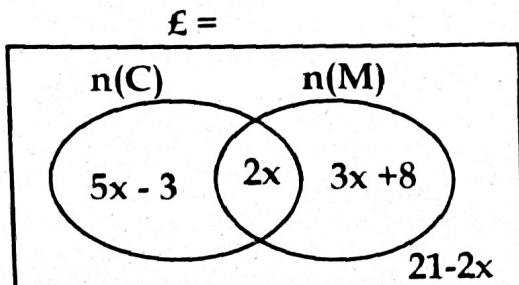
- (b) Given that $4nn_{\text{five}} = 314_{\text{six}}$. Find the value of n. (03marks)

- 22 Opoloti went to the market and bought the following items.

3 bars of soap at sh. 3500 a bar.
750ml of cooking oil at sh.12000 per litre.
21 apples at sh. 1800 for every 3 apples.
2kg of sugar at sh.7000.

- (a) If he was given a 10% discount, how much did he pay for all the items? (05marks)

- 23 The Venn diagram below shows the number of guests who ate chicken (C) and meat (M). Study it carefully and answer the questions that follow.



- (a) If 30 guests did not eat meat at all, find the value of x . (03marks)
- (b) Find the total number of guests who attended the party. (02marks)

- 24 A motorist drove his car from 10:45am at an average speed of 36km/hr to 1:00pm.

(a) Calculate the distance he covered. (03marks)

(b) If his car consumes 6 litres of diesel for every 18km and each litre costs sh.6200. How much will the whole journey cost him? (03marks)

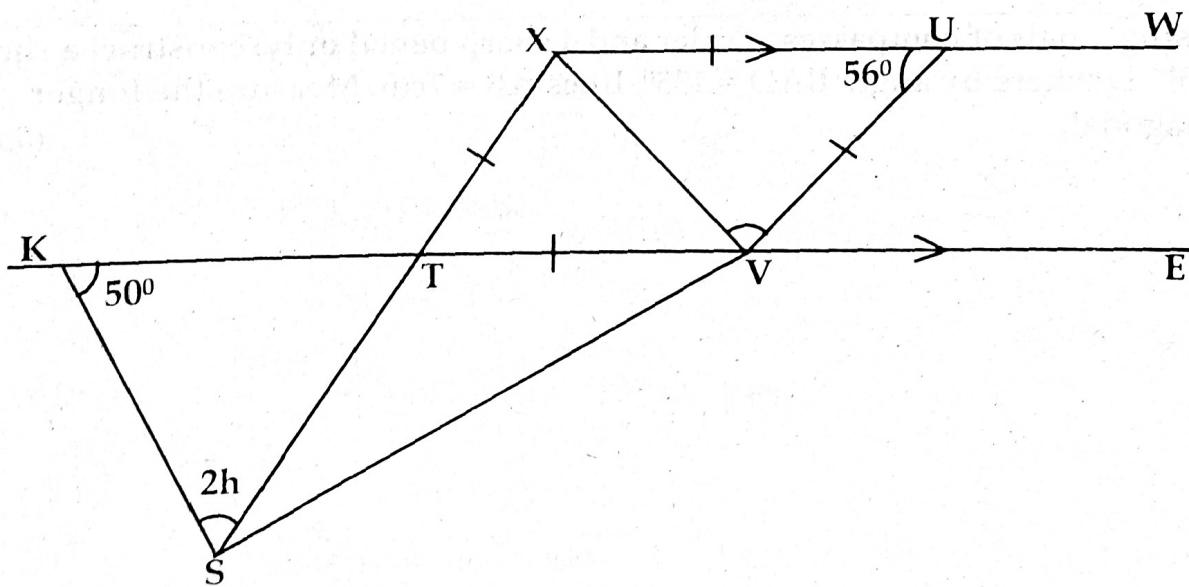
25

(a) Solve: $\frac{4}{5}(30 - 15k) = 3(k - 7)$. (03marks)

(b) Solve the inequality and state the solution set for $22 \leq 4x - 2 > 10$.
(03marks)

26

In the diagram below, line XW is parallel to line KE . Study it carefully and answer the questions that follow.



(a) Find the value of h . (02marks)

(b) Find the size of angle XVE.

(03marks)

27

A trader banked money in centenary bank which offers $2\frac{1}{3}\%$ interest rate per year. If his account had an amount of sh. 181400 after a period of 4 months, calculate the money he banked.

(04marks)

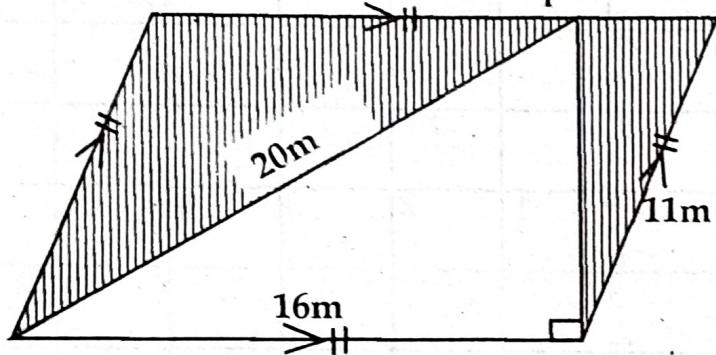
28

Using a pair of compasses, a ruler and a sharp pencil only, construct a rhombus ABCD where by angle BAD = 135° , lines AB = 7cm. Measure the longer diagonal.

(05marks)

- 29 A box of guavas weighs 45kg. The empty box weighs 1.8kg. If each guava weighs 300gms, how many guavas are in the box altogether? (04marks)

- 30 Workout the area of the shaded part in the figure below. (05 marks)

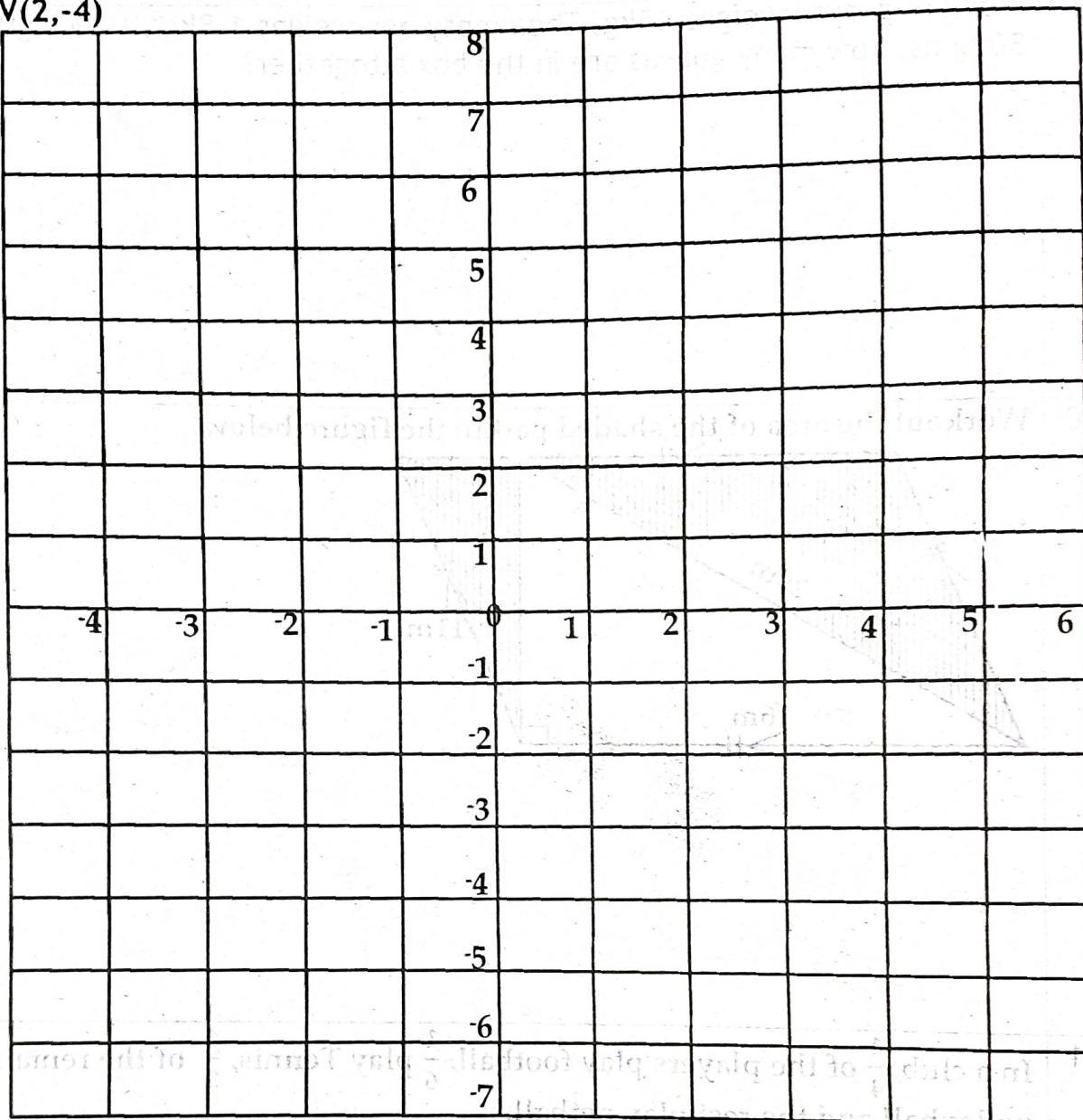


- 31 In a club, $\frac{1}{4}$ of the players play football, $\frac{1}{6}$ play Tennis, $\frac{4}{5}$ of the remainder play volleyball and the rest play netball.

(a) What fraction of the players play netball? (04 marks)

(b) If 21 players play netball, how many players are in the club altogether? (01 marks)

- 32 (a) Plot the following points on the grid below. S(-3, -4), T(-3, 1), U(2, 5) and V(2, -4)



- (b) Join points S to T, T to U, U to V, V to S. find the area of the geometric figure formed. (01 mark)



Hidden Tip For Excellence in Mathematics.

Practising and mastering basic mathematical concepts gives you a strong foundation to excel at Mathematics.