

BROAD EXAMINATIONS®

P.7 MATHEMATICS EXAMINATION

MID – TERM II 2024

Time allowed: 2 hours 30 minutes.

Random No.						Personal No.		

Pupil's Name:

School Name:

District Name:

Read the following instructions carefully:

1. This paper is made up of two sections: **A** and **B**.
2. Section **A** has **20** questions (**40 Marks**).
3. Section **B** has **12** questions (**60 Marks**).
4. Answer **ALL** questions in both sections **A** and **B**.
5. All answers must be written in the space provided in blue or black ball point pens and ink. **Only diagrams should be done in pencil.**
6. Unnecessary crossing of answers will lead to loss of marks.
7. Any handwriting, which cannot be easily read, may lead to loss of marks.
8. Do **not** fill anything in the boxes indicated for Examiners' use only.

**FOR EXAMINER'S
USE ONLY**

PAGES	MARKS	SIGN
Page 2		
Page 3		
Page 4		
Page 5		
Page 6		
Page 7		
Page 8		
TOTAL		

Teacher's comment to the learner

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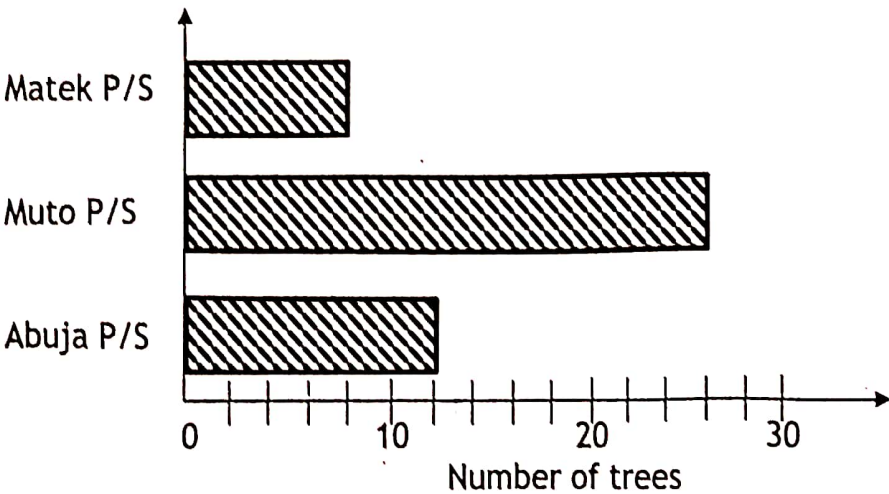
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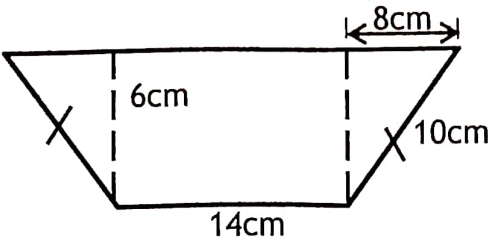
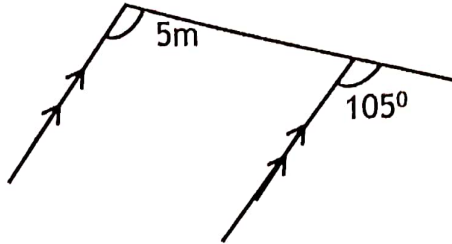
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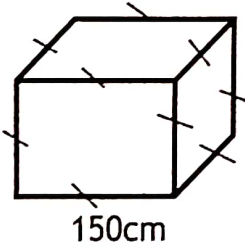
Approved by:

Team Head Mathematics Dept.

SECTION .A. (40 MARKS)

<p>1. Complete correctly.</p> <p>$\overset{110}{137} = 1 \text{ hundreds } ____ \text{ tens } ____ \text{ ones}$</p>	<p>2. Given that $B = \{a, m, e, r, t\}$ $D = \{r, a, h, o, k, e\}$ Find the number of elements in set $D - B$.</p>								
<p>3. Shade $\frac{2}{3}$ of the diagram below.</p> 	<p>4. A bus made 295 trips to Kampala in 2022. If it carried an average of 50 people per trip, find the total number of people it carried in 2022.</p>								
<p>5. The bar graph below represents the number of trees planted by three schools. Use it to answer the questions about it.</p>  <table border="1"> <caption>Data from Bar Graph</caption> <thead> <tr> <th>School</th> <th>Number of trees</th> </tr> </thead> <tbody> <tr> <td>Matek P/S</td> <td>8</td> </tr> <tr> <td>Muto P/S</td> <td>26</td> </tr> <tr> <td>Abuja P/S</td> <td>12</td> </tr> </tbody> </table>		School	Number of trees	Matek P/S	8	Muto P/S	26	Abuja P/S	12
School	Number of trees								
Matek P/S	8								
Muto P/S	26								
Abuja P/S	12								
<p>(a) Which school planted the lowest number of trees?</p>	<p>(b) How many trees did Muto Primary School plant?</p>								

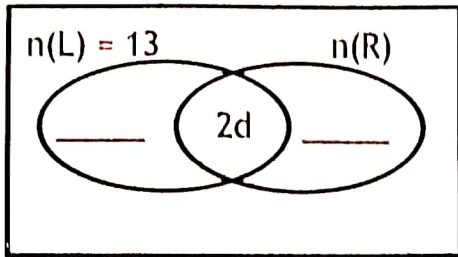
6.	<p>Work out the area of the trapezium below.</p> 	7.	<p>Find the value of m in the diagram below.</p> 
8.	Write 80,096 in words.	9.	Find the additive inverse of -6.
10.	Simplify; $0.24 \div 0.4$	11.	Change 3:45p.m. to 24 hour clock system.
12.	Without dividing, show that 576 is divisible by 9.	13.	Given that US\$ 1 costs Ugsh. 3744 and Ksh 1 costs Ugsh. 26, what is the cost of one US dollar in Kenya shillings?

14.	Apollo deposited sh. 80,000 in a bank which offers an interest rate per annum. If he was given an interest of sh. 1000 after 3 months, find the percentage rate the bank offers.	15.	The average of 11, -2, 6, $(w+5)$ and 8 is 6. Find the value of w .
16.	Draw an angle of 67° using a protractor.	17.	Simplify; $2k - 3p + 7k - 2p$
18.	Given that set K has 32 subsets, find $n(K)$.	19.	A temple was constructed in 27BC and later demolished in 33AD. How many years did the temple last?
20.	<p>The figure below is a fuel tank at a certain petrol station. Find the capacity of the fuel tank in litres.</p> 		

SECTION .B. (60 MARKS)

21. In a football team, 13 players use the left leg(L), 16 players use the right leg(R) only and 2d players use both legs.

(a) Use the information above to complete the venn-diagram below.



(b) If 22 players use the Right leg, find the number of players in the whole team.

(c) Find the probability of picking a player who uses the left leg to be the team captain.

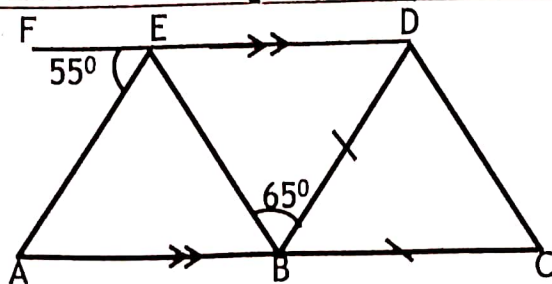
(06 Marks)

22. (a) Work out;
$$\begin{array}{r} 1101_{\text{two}} \\ \times 11_{\text{two}} \\ \hline \end{array}$$

(b) Given that $76_y = 234_{\text{five}}$, find the unknown base y.

(04 Marks)

23. In the figure below, line FD is parallel to AC, line AE is perpendicular to EB, angle FEA is 55° and angle EBD is 65° . Use it to answer the questions that follow.



(a) Find the size of angle EBC;

31.	Kalanzi bought a radio and later sold it making a profit of 20% to Kapere who later sold it to Mukwaya making a profit of 5%. If Kapere paid sh. 96,000;		
(a)	how much money did Kalanzi pay for the radio?	(b)	calculate the amount of money which Mukwaya paid for the radio.
(05 Marks)			

32. The table below shows the number of sweets that were given to four children. Study it carefully and use it to answer the questions that follow.

Bob	
Beth	
Betty	
Bonny	

- (a) Who received the highest number of sweets?
- (b) How many sweets did Betty receive?
- (c) Calculate the average number of sweets that were received by four children.

END

(05 Marks)