



# OUTREACH SCHOOLS EXAMINATIONS BOARD

## MOCK PREPARATION SET FIVE

### PRIMARY SEVEN

2023

### MATHEMATICS

*Time Allowed: 2 hours 30 Minutes*

Random No.						Personal No.		

**Candidate's Name:** .....

**Candidate's Signature:** .....

**School Name:** .....

**District No:**

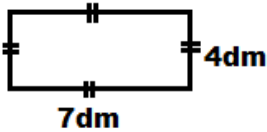
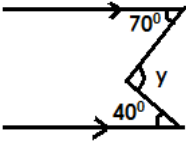
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**Read the following instructions carefully:**

1. This paper has two sections: **A** and **B**
2. Section **A** has 20 short questions (40 marks)
3. Section **B** has 12 questions (60 marks)
4. Answer all questions. All the working for both sections A and B must be shown in the spaces provided.
5. All working must be done using a blue or black ball point pen or ink. Any work done in pencil will NOT be marked except drawings and diagram.
6. Unnecessary changes in your work and handwriting that cannot be easily read may lead to loss of marks.
7. Do not fill anything in the table indicated  
**"For examiners' use only"** and the boxes inside the question paper.

FOR EXAMINERS' USE ONLY		
Qn. No.	MARKS	EXR'S No.
1 - 10		
11 - 20		
21 - 30		
31 - 32		
TOTAL		

# SECTION A

1. Divide: $0 \div 5$	2. Simplify: $5a + 2d - a$
3. Find the expanded number $(4 \times 10^3) + (7 \times 10^1) + (3 \times 10^{-2})$	4. Write 44 in Roman numerals.
5. If $A = \{\text{Prime numbers less than } 10\}$ Find $n(A)$	6. Find the area of the rectangle 
7. Solve: $2m - 4 = 10$	8. Find the value of angle marked $y$ . 
9. Add $224_{\text{five}} + 112_{\text{five}}$	10. A forty-five minutes' lesson ended at 9:30am. At what time did it start?

11. A car covered 60km in 15minutes. Calculate its speed in m/s	12. What is the next number in the sequence? 4, 5, 7, 10, ____
13. Decrease 800 by 20%	14. Using a pair of compasses only construct an angle of $120^\circ$ .
15. If a pen costs 400/=. How many pens can be bought with 2,400/=	16. Shade $(P \cap Q)$  
17. A square field has an area of $1600\text{m}^2$ , find the total distance around it.	18. If  represents 8 balls. Draw the pictures to represent 40 balls.
19. Express 0.333..... as a common fraction.	20. Add: $1\frac{2}{3} + 2\frac{1}{3}$

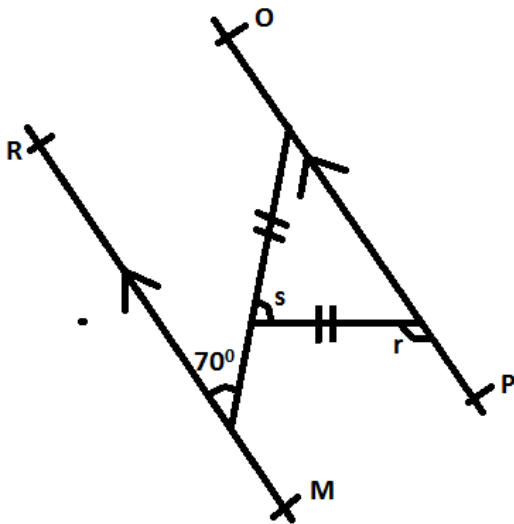
# SECTION B

21. Using a ruler a pair of compasses only construct triangle ABC where  $BC = 6\text{cm}$ , angle  $ABC = 30^\circ$  and angle  $ACB = 60^\circ$  **3marks**

(b) Measure AC

**1mark**

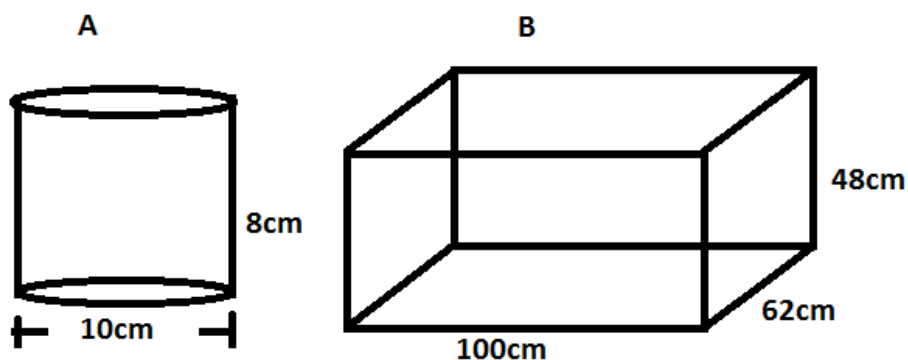
22. In the figure below find the values of angles marked  $r$  and  $s$ . **4marks**



23. (a) Simplify:  $2(2x + 4)$  **2mks**

(b) Solve  $2k - 4 = 14$  **2mks**

24. (a) Given that tins of size A were packed in a box of size B.



(a) Find the number of tins that were packed in the box altogether **2marks**

(b) Calculate the capacity of the box in litres **2marks**

25. The table below shows a shopping list. Fill the blanks. **4mks**

Items	Quantity	Unit cost	Amount
meat	2kg	sh. 1500 @kg	.....
sugar	$2\frac{1}{2}$ kg	sh. 1400 @kg	.....
rice	.....kg	sh. 1600@kg	sh. 3200
salt	4kg	sh. ....@kg	sh. 1600

(b) If the shopper had 20,000/= calculate the change he got. **2mks**

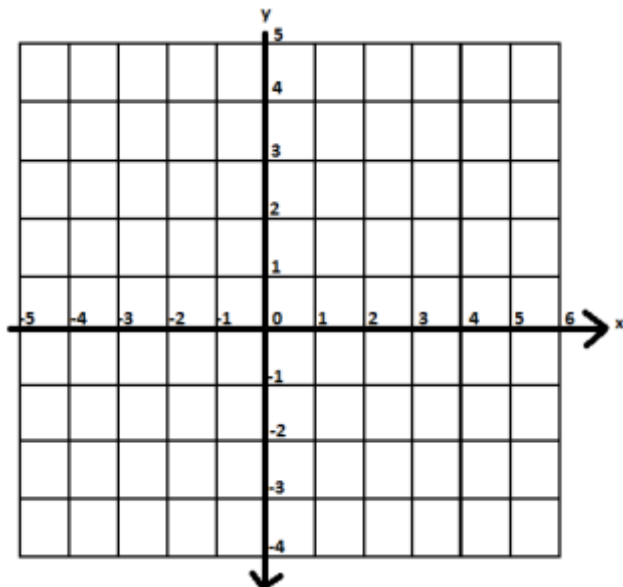
26(a) Simplify:  $\frac{8.4 \times 0.02}{0.7 \times 0.6}$  **2mks**

(b) Expand 62.5 using powers. **2mks**

27. Use the grid below and plot the following **4mks**

Points: A(-3,-3) B(3,-3) C(3,3) D(-3,3) Join the points A to B, B to C, C to D and D to A. **1mk**

(c) Calculate the area of the shape. **1mk**



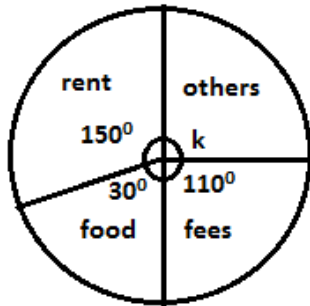
28. The sum of three consecutive counting numbers is 39. Find the numbers.

**3mks**

(b) Calculate their mean. **2mks**

29. The pie chart below shows Ali's expenditure for the month of March, where he earned 720,000/=

(a) Find the value of k. **2mks**



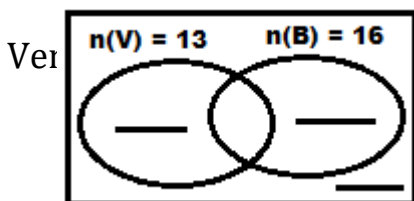
(b) How much money does he spend on:-

(i) Rent **1mk** (ii) School fees **1mk**

(c) How much more does he spend on rent than school fees? **2mks**

30. In a class of 28 pupils, 13 like volleyball, 16 like basketball, x like both games and 4 like neither of the games.

$$n(\mathcal{E}) = 28$$



(a) Represent the above information on the

(b) Find the value of x.

**2mks**

(c) How many pupils like volleyball only? **1mk**

(d) What is the probability of choosing a pupil who plays only one type of game? **1mk**

31. Tom was told to form a number using the  
Digits 2, 7, 5, 1.

(a) Write the smallest four digits' numeral. **1mk**

(b) Find the difference between the biggest and smallest numerals. **2mks**

(c) Write the smallest numeral formed in words **2mks**

32. Three traders A,B and C share the profits worth 7,200/= in the ratio 3:5:2 respectively.

(a) How much money did each get? **3mks**

(b) How much money did trader A and C get altogether? **2mks**

**END**