

EDUCATION SOURCE EXAMINATION BOARD 2024
PRE-PLE EXAMINATION 2024 SET III
P.7 MATHEMATICS

Time allowed: 2 Hours 15 Minutes

**TARGET
MARK**

Index No.

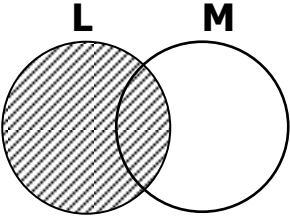
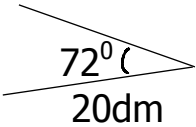
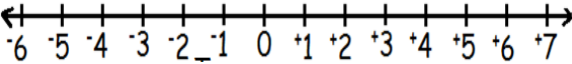
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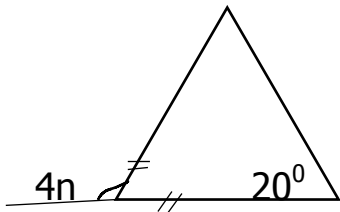
CANDIDATE'S NAME:

CANDIDATE'S SIGNATURE:

SECTION A

1.	<p>Workout: 4 4 4 - 3 2 3 <u> </u> _____</p>	6.	<p>Peter walked round a rectangular garden measuring 40m by 35m twice. Find the distance he covered.</p>
2.	<p>Given that set R has 15 proper subsets. Find the number of elements in set R.</p>	7.	<p>Simplify: $20p - 14y - 15p + 4y$</p>
3.	<p>Solve for y: $4 - 8y = 20$</p>	8.	<p>Find the next number in the sequence below.</p> <p>15, 19, 21, 25, 27, _____</p>

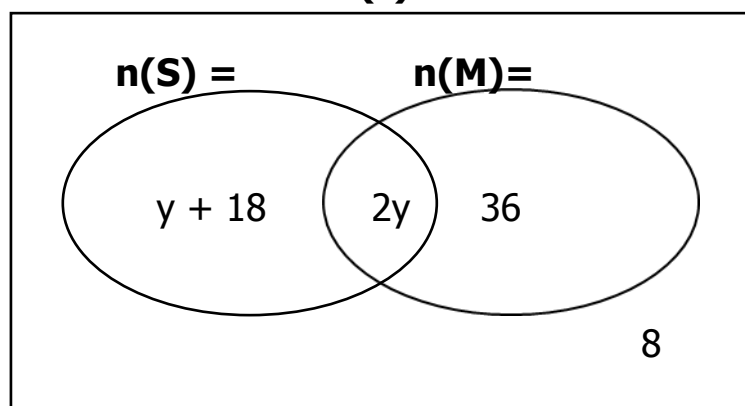
4.	Construct an angle of 75° in the space below.	9.	Describe the unshaded part. 
5.	Calculate the perimeter of the figure below. 	10.	Simplify: $\frac{4}{5} - \frac{1}{7}$
11.	Mary is about to give birth. What is the probability that she will give birth to a baby girl?	16.	Workout: $+3 \times +2$ using the numberline below. 
12.	Change 25g to kg.	17.	Mark scored the following marks in series of tests. Find his average score. 15, 25, 10, 45, 17, 18, 19.
13.	Workout: $\begin{array}{r} 2 \quad 4 \quad 2 \text{ five} \\ + 4 \quad 2 \quad 4 \text{ five} \\ \hline \\ \hline \end{array}$	18.	Jane ran 200metres in 20 Sec. Calculate her average speed in km/hr.

14.	Find the value of n in the figure below. 	19.	Express 30% as a ratio in its simplest form.
15.	The cost 3 books is sh.3,600. Find the cost of a score of similar books.	20.	Simplify: $4 + 5 = \underline{\hspace{2cm}} \pmod{7}$

SECTION B

- 21** In Mother Majeri Primary School, P.7 class children participated in math contest (M) and science fair (S) as shown on the venn diagram below.

$n(\mathcal{E})$



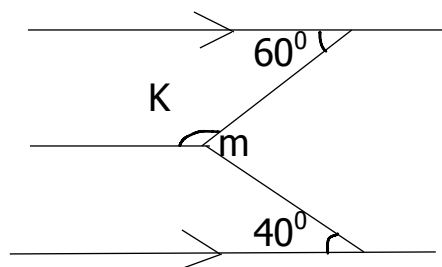
- a) Given that the number of children who participated in math contest only is equal to the number of science fair participants, find the value of y .

	<p>b) How many children participated in at least one activity?</p> <p>C) How many children were in the class?</p>
22	<p>Okot went to the supermarket and bought the following items.</p> <ul style="list-style-type: none"> - 5 loaves of bread at sh.2,000 @loaf. - 3kg of rice at sh. 3,200 @kg. - $2\frac{1}{2}$ litres of cooking oil at 6000 per half litre. <p>a) How much did he spend altogether?</p> <p>b) If he went with 2 notes of fifty thousand shillings, how much was his change?</p>
23	<p>Given that Joy is thrice as old as Martha. If Arnold who is 36yrs old is 6 years younger than joy,</p> <p>a) How old is Martha?</p>

	<p>b) Calculate the age of Joy.</p>
24	<p>a) Construct a quadrilateral PQRS where $\overline{PQ} = 7\text{cm}$, $\overline{QR} = 4.5\text{cm}$ and angle at Q = 105°.</p> <p>b) Measure the length; (i) SQ.</p>
25	<p>a) Find the least number which when divided by seven, 3 remains, when divided by four, 2 remains but when divided by eight, 6 remains.</p>

26	<p>a) Simplify: $\frac{1.6 \times 2.8}{1.2 + 2.8}$</p> <p>b) Given that m= 2, b = 4, c = -5.</p> <div style="display: flex; justify-content: space-between;"> (i) mbc (ii) $\frac{bc}{M}$ </div>
27	<p>Alum borrowed sh.200,000 from a village saving group that offers a simple interest rate of 5% per month for 2 years.</p> <p>a) Find the simple interest she paid to the bank after the period of 2 years.</p> <p>b) Calculate the amount she paid at the end of the period of 2 years.</p>

28 Study the figure below carefully and use it to answer the questions below.



a) Find the value of;

(i) K

(ii) m

b) What angle is $\frac{1}{5}$ of its supplement?

29

a) Given that $\frac{2}{3}$ of Peters' salary is $\frac{3}{4}$ of Mary's salary. Find Peters' salary if Mary's salary is sh. 120,000.

30	<p>a) Change $2\frac{1}{2}$ hours into minutes.</p> <p>b) Convert 2400kg into tonnes.</p>
31	<p>a) Write 24 in Roman numerals.</p> <p>b) Show 424_{six} on the abacus below.</p> <div data-bbox="402 1205 826 1583" data-label="Diagram"> <p>The diagram shows an abacus with three vertical rods. The leftmost rod is labeled 'H', the middle rod is labeled 'T', and the rightmost rod is labeled 'O'. Below these rods is a horizontal rectangular frame, which is the base of the abacus.</p> </div> <p>c) Change 121_{three} to base ten.</p>
32	<p>a) Solve: $2(2X + 4) = 24$</p>

b) Solve the inequality: $2X - 3 \geq 8$

c) Write the solution set for the inequality in b above.

END