# LUNGUJJA PROGRESSIVE NURSERY AND PRIMARY MIXED DAY AND BOARDING SCHOOL 

## Holiday work

## MATHEMATICS

PRIMARY SIX

Time Allowed: $\mathbf{2}$ hours 30 minutes

Name :

## DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

## Read the following instructions carefully:

1. This paper has two sections: A and B.
2. All the working for both sections $\mathbf{A}$ and $\mathbf{B}$ must be shown in the spaces provided.
3. All working must be done using a blue or black ball-point pen or fountain pen. Any work done in pencil other than graphs, pictures and diagrams will not be marked.
4. No calculators are allowed in the examination room.
5. Unnecessary changes of work may lead to loss of marks.
6. Any handwriting that cannot easily be read may lead to loss of marks.
7. Do not fill anything in the boxes indicated:
"For Examiners' Use Only"

| FOR EXAMINERS' <br> USE ONLY |  |  |
| :--- | :---: | :--- |
| Qn. No. | MARKS | EXRS' IN. |
| $1-5$ |  |  |
| $6-10$ |  |  |
| $11-15$ |  |  |
| $16-20$ |  |  |
| $21-22$ |  |  |
| $23-24$ |  |  |
| $25-26$ |  |  |
| $27-28$ |  |  |
| $29-30$ |  |  |
| $31-32$ |  |  |

## SECTION A

## 1. Workout: $32 \times 3$

2. Calculate the value of $\mathbf{7}$ in the numeral $\mathbf{5 7 6 2 4 8}$
3. If set $R=\{$ all prime numbers which are less than 15$\}$ find $n(R)$
4. Find the next number in the sequence

6, 9, 12, 15,
5. Workout: - 10 - - 6
6. Draw an angle of $\mathbf{5 0 ^ { \circ }}$ using a pencil, ruler and a protractor only.
8. Express 47 in roman numerals.
9. Change $41 / 2 \mathrm{~km}$ to meters.
10. In the Venn diagram below shade the region (TnR) complement.

11. Prime factorize $\mathbf{2 4}$ and list its prime factors in subscript form.
12. What morning time is shown on the clock face below.

13. The pictograph below shows the number of balls received by some boys. If - stands for 2 balls. Complete the pictograph correctly.

| NAME | PICTURES | NO. OF BALLS |
| :---: | :---: | :---: |
| Mark |  | 10 |
| John | .............................. | 14 |
| Matthew |  | 6 |
| Martha | $0$ | ................. |

14. Workout:
$\frac{1}{6}+\frac{1}{4}=$
15. The cost of one dozen of books is sh. 36000 . Find the cost of one book at the same rate.
16. Use the figure below to calculate the value of angle marked K in degrees.

17. On the abacus below, draw beads to represent the numeral 4602

18. Seven pupils scored the following marks in a test. $6,7,10,6,4,9$ and 5. Determine their median mark.
19. Workout: 240 five -13 five.
20. Simplify: $2 m-3 m+5 m$.

## SECTIION B

21. (a) What number has been expanded below? $\left(8 \times 10^{3}\right)+\left(6 \times 10^{2}\right)+\left(4 \times 10^{0}\right)$
(b) Calculate the sum of the value of 9 and the value of 2 in the numeral 49325.
22. Study the number line below carefully and use it to answer that question.

(a) Identify the integers indicated by arrows.
(3 marks)
c
d
e
$\qquad$
d $\qquad$
$\qquad$
(b) Write the addition mathematical statement shown on that numberline above.
23. Mr. Musoke went to the market and bought the following items.
(i) 2 kg of meat at sh. 16000
(iii) $1 \frac{1}{2} \mathrm{~kg}$ of sugar at sh. 4000 per kg.
(iii) 500 g of rice at sh. 4000 per kg.
(a) Workout the total expenditure for Mr. Musoke.
(b) If he was given a balance of sh. 900, how much did he have at first?
24. The figure drawn below is a rectangle $A B C D$. Study it and answer the questions that follow.

(a) If the perimeter of the rectangle is 28 cm , find its width (W).
(3 marks)
(b) Find the area of the rectangle above.
(2 marks)
25. In a village of 26 farmers, 12 grow cash crops (C), 15 grow food crops (F), 5 grow both cash crops and food crops. While 4 do not grow any of the two types of crops.
(a) Use the information above to complete the Venn diagram below.

(3 marks)
(b) Find the number of farmers who grow only one type of crop.
(2 marks)
26. Using a pencil, ruler, and a pair of compasses only. Construct a square WXYZ of sides 6 cm .
(4 marks)
(b) Measure the diagonal XZ .
27. The Venn diagram shows Fn and Fm, use it to answer the questions that follow.

(a) Find the value of $n$.
(2 marks)
(b) Find the value of $m$.
(2 marks)
(c) Find the G.C.F of $n$ and $m$.
(1 mark)
28. (a) Find the distance covered by the bus travelling at a speed of $80 \mathrm{~km} / \mathrm{hr}$ for 3hours.
(2 marks)
(b) A Tata lorry covered a distance of 360 km in only 4 hours. Workout the speed of the tata lorry.
(c) Workout:

| HRS | MINS |
| :---: | :---: |
| 6 | 20 |
| -1 | 30 |

29. In the figures below, find the value of $\mathbf{X}$ and $\mathbf{Y}$ in degrees.

(2 marks)
30. Given that $\mathbf{a}=\mathbf{4}, \mathbf{b}=\mathbf{3}, \mathbf{c}=\mathbf{5}$, find the value of;
(i) $a+b+c$
(iii) $a^{2}+2 c$
(2 marks)
31. In a school of 600 pupils, $\frac{7}{10}$ of them are girls and the rest are boys.
(a) Find the fraction of boys in the school.
(b) How many boys are in the school?
(2 marks)
(c) Workout the number of girls in the school.
32. The bar graph below shows the race results among four athletes who participated for different teams during sports day. Study it carefully and answer the questions that follow.

(a) Who took the most minutes to complete the race?
(b) Who won the race according to the graph above?
(1 mark)
(c) Workout the total time in minutes taken by all the athletes to complete the race by the time the stopping whistle was blown by the referee.
