

ADM. NAME

CLASS
TIME: $1 \mathrm{hr}-12^{\text {th }}$ Test

## INSTRUCTIONS:

1. Write your name, class and ADM number in the spaces provided above.
2. Answer all the questions provided in this question paper
3. All workings must be clearly shown
4. Any acts of cheating will render your examinations nullified
5. Sign and write the date of the examination in the spaces provided below
6. This exam has four printed pages. Please confirm.

| Invigilator's Name | Date Issued | Date Returned | Date Revised | Student's signature |
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|  |  |  |  |  |
| TEACHER'S <br> COMMENT |  |  |  |  |

## For examiner's use only

| Question/Section/Page | 1 | 2 | 3 | 4 | Total |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Max. Score |  |  |  |  |  |
| Candidate's Score |  |  |  |  |  |

## Questions

1. Three similar steel bars of length $200 \mathrm{~cm}, 300 \mathrm{~cm}$ and 360 cm are cut into equal pieces. Find the largest possible area of a square which can be made from any of the three pieces ( $\mathbf{3} \mathbf{~ m k s}$ )
2. Ole Mashamba walked four floors down from the tenth floor and then took a lift to the eighteenth floor. How many floors did he go through while in the lift?
3. 

a. It takes $1 \frac{1}{2}$ days to make a toy train. How many such toys can be made in two weeks? ( 2 mks )
b. An integer P is two thirds of another and their difference is 10 . Find the two integers. ( $\mathbf{3} \mathrm{mks}$ )
c. An alloy is to be made by combining copper and alluminium in the ratio $3: 8$. If there is 39 Kg of copper, how much aluminium is required to make the alloy? ( $\mathbf{3} \mathbf{~ m k s}$ )
d. John is twice as old as his brother Kogo, and their sister Jane is 7 years younger than Kogo. Write down an expression for the sum of their ages ( $\mathbf{3} \mathbf{~ m k s}$ )
4.
a. Two rings of diameter 9 CM and 12 CM are cut and joined to make one large ring. Find the radius of this ring ( $\mathbf{3} \mathbf{~ m k s}$ )
b. A bicycle wheel turns 15 times to cover a distance of 66 M . find the radius of the wheel use $\pi=\frac{22}{7}$ ( 2 mks )
5. The diagram below represents a lounge room in a house. The walls and the ceiling are to be printed

a. Find the area of the walls of the lounge ( $\mathbf{3} \mathbf{~ m k s}$ )
b. The area of the ceiling
(2 mks)
6. Find the surface area of the figure below
(4 mks)

7. A school tank has a radius of 2.1 M and a height of 450 cm .
a. How many litres of water does it carry when full? ( $\mathbf{3} \mathbf{~ m k s}$ )
b. If the school uses 5000 litres of water a day approximately how many days will the tank last? ( $\mathbf{3} \mathbf{~ m k s}$ )

