

NAME.....ADM NO.....DATE.....

KISIRIRI SECONDARY SCHOOL

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CAT ONE OF 3ND TERM 2013

FORM ONE

MATHEMATICS

ONE HOUR

1. Evaluate $(-5 + -3) \times (-2 + 8) \div 4$ (2mks)

2. Write the following expression as a single fraction (3mks)

$$\frac{X + 2y}{4} - \frac{2x - y}{5}$$

3. Four business partners Munyao, Kinura Mulisis and Mango made a profit of shs, 5,600 in one month. They set a side 25% profit for running the business. Yhey then shared the rest in the ratio 2:3:4:6 respectively. How much did Mango get? (3mks)

4. A farmer has three containers of capacity 12L, 15L and 21L. Calculate the capacity

a) the smallest container which can be filled by each one of them on an exact number of times (2mks)

b) The largest container which can fill each one of them on an exact number of times. (2mks)

5. A rectangular slab of glass measures 5cm by 3cm by 14cm and has a mass of 450g. Calculate the density of the glass in kg/m^3 (3mks)

6. The inside circumference of a circular sports track is 440m long. If the sports track is 10m wide. Find the cost of leveling the sports track at sh. 3.50 per square metre. (4mks)

7. construct a trapezium where CD is parallel to BE. Given that $CD = 4\text{cm}$ $BD = 5\text{cm}$ and $AC = 12\text{cm}$

Hence Calculate the area of trapezium ABCDE

(6mks)

8. Express $0.\overline{7}$ as a fraction

(3mks)

9. Wanjala drives from town A to B starting 2330 hours and he drives non stop at 66km/hr to reach town B at 0050 hours. Find how far B is from A (3mks)

10. Nasimiyu and Atieno bought the same type of pens and exercise books from the same shop. Nasimiyu bought 2 pens and 3 exercise books for kshs. 78 and Atieno bought 3 pens and 4 exercise books for shs 108. Calculate the cost of each item. (3mks)

11. A sector of a circle of radius 3.5cm has an angle of 120° subtended at the centre. Find the perimeter of the sector. (4mks)

12. a) Express 7056 as a product of its prime factors. (2mks)

b) Hence evaluate $\sqrt{7056}$ (2mks)

13. on the grid provided below, draw the plane figure whose vertices are A(-4,-6), B(6,-6), C(0,8) and D(10,8). Hence calculate the area of the figure. (6mks)

