

NAME ADM NO

GATITU MIXED SEC SCHOOL

MATHEMATICS FORM 1 TERM 3 2014 MID TERM EXAM

1. Write twenty million, four hundred and thirty one thousand, and four hundred and one in symbols. 2mks

2. Three alarm clocks ring at intervals of 30min, 35 min and 40 min respectively. If they rang together at 4.10am in the morning at what time will they next ring together? 3mks

3. Evaluate 3mks
$$\frac{-8 \div 2 + 12 \times 9 - 4 \times 6}{56 \div 7 \times 2}$$

4. 3 friends Njeri, Nzimbi and Lengwa decided to buy a car. Njeri paid $\frac{1}{4}$ of the cost. Nzimbi paid $\frac{1}{3}$ of the cost and lengwa paid the rest of the money. If Nzimbi paid sh. 15,000 more than Njeri, find the cost of the car. 3mks

5. Express $0.2\overline{070}$ as a fraction in its simplest form.

3mks

6. Simplify $(4x + 3y + 3z) - (z - 4y + 2x)$

2mks

7. It takes 6 workers 24 hrs to pack 2800 crates of sodas on lorries. How long would it take 4 workers to pack 4200 crates of sodas on Lorries if they worked at the same rate? 3mks

8.

a) A bus left town A at 153 sh and arrived at B at 181 sh. How long did the journey take? 2mks

b) A bus leaves town A at 9.35 am and arrives in town B after 5 hrs. what time did the bus arrive in

i. 24 hour clock? 2mks

ii. 12 hour clock? 2mks

9. Solve for x in

3mks

$$\frac{x-2}{3} - \frac{3-x}{4} = \frac{x-2}{2}$$

10. Use elimination method to solve the simultaneous equations.

4mks

$$\begin{aligned} 5x + 2y &= 16 \\ 2x + y &= 9 \end{aligned}$$

11. Use substitution method to solve .

4mks

$$\begin{aligned} x + 2y &= 8 \\ 5x + 7y &= 24 \end{aligned}$$

12. The Kenyan bank buys and sells foreign currency as shown below

	Buying (ksh)	Selling (ksh)
1 euro	147.56	148.00
1 us dollar	74.22	74.50

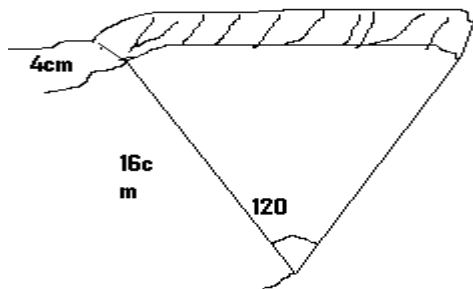
an American tourist arrived in Kenya with 20,000 Euros. He converted all Euros to Kenya shillings at the bank. He spent sh. 2510200 while in Kenya. He converted the remaining Kenya shillings to Us Dollars at the bank. Find the amount in dollars he received. 3mks

13. Find $\sqrt{576}$ by factorization

3mks

14. The radius of a circle is 7 cm . Find the circumference of the circle . Hence, find the length of an arc of the circle which subtends an angle of 45 at the centre. 3mks

15. The shaded region shows the area swept out on a flat wind screen by a wiper. Calculate the area of the region. 4mks



16.

- a. A school water tank has a radius of 2.1 m and a height of 450 cm. how many litres of water does it carry when full? 2mks
- b. If the school uses 5000 litres of water a day, approximately how many days will the full tank last? 2mks

17. Mama mwamba bought the following goods from a supermarket.

3kg of sugar @ sh. 46.00

2 loaves of bread @ sh. 22.50

4 packet of milk @ sh. 25.50

- a. How much did she pay for the goods? 2mks

- b. How much would she have paid for the goods had she been allowed a 10% discount?
2mks

18. Simplify by use of common factors

3mks

$$3bx - 3by + 4ax - 4ay$$

$$4a + 3b$$

ALL THE BEST