

FORM ONE MATHEMATICS TERM TWO MID TERM 2015

1. Use tables to find the square of each of the following: (10 marks)

(a) 8945.452

(b) 46

(c) 46.0981

(d) 0.0001456

(e) 0.000056454

2. Test whether 712008 is divisible by 11.

2mks

3. A vegetable vendor had 1348 cabbages. He sold 750 on the first day and 240 on the second day. He added 462 to the remaining stock on the third day.

a) How many cabbages did he have at the end? 2mks

b) If he sold all the cabbages at an average cost of sh.12 how much money did he collect? 2mks

4. If  $A = (R^2 - r^2)$  find A when  $R = 19$  and  $r = 11$  2mks

5. Simplify by use of the common factor. 4mks

a) 
$$\frac{3bx - 3by + 4ax - 4ay}{4a + 3b}$$

b)  $\frac{pa + pb}{Ka + kb}$

$Ka + kb$

6. Use tables of squares to evaluate

4mks

a.  $6250^2 - 0.1750^2$

b.  $\left(\frac{0.706 \times 20.5}{32.2}\right)^2$

7. Juma spent  $\frac{1}{2}$  of his salary on school fees,  $\frac{1}{8}$  on farming and  $\frac{2}{3}$  of the remainder on food. Calculate his July salary if he spent sh. 3200 on food.

3mks

8. Find the ratio a:c if a:b = 3:5 and b:c = 6:5

2mks

9. A furniture which was costing sh. 1800 now costs sh. 1450. What is the percentage decrease? 2mks

10. Express the following measurements into 3 significant figures 3mks

i. 351.0032

ii. 0.10720

iii. 4.095

11. Kinyoho is twice as old as his brother kimacia and their sister kalucy is 7 years younger than kimacia. Write an expression for the sum of their ages. 2mks

12. Express the following recurring decimals as fractions 2mks

i.  $0.\overline{7}$

ii.  $0.67^0$

13. Evaluate

3mks

$$3/5 \div 2/3 - 1/2 \times 1/13 \text{ of } (1/2 + 4/5)$$

14. Find the least amount of cement that can be put into bags which all contain 20kg or 25 kg or 40 kg or 50kg.

3mks

15. Evaluate

2mk

i.  $55.31 + 100.184 - 140.912$

ii. 
$$\frac{15.2 \times 0.051 \times 6.5}{120 \times 2.5 \times 60}$$

16. Kericho is a town on Kisumu-Nakuru road. The distance between Kisumu and Kericho is 85km, while that between Kericho and Nakuru is 105km. What is the distance between Nakuru and Kisumu? 2 marks