

GATITU MIXED SECONDARY SCHOOL

MATHEMATICS FORM 1 END OF TERM 3 2015 EXAM

1.

a) Evaluate $540396 - 726450 \div 3$ 1mk

b) Write the total value of the digit in the thousands place of the results obtained in (a) above 1mk

2. The volume of a cube is 1728 cm^3 . Calculate, correct to 2 decimal places, the length of the diagonal of a face of the cube. 3mks

3. Find the sum of a third of $(a+b)$ and fifth of $(a-b)$ 3mks

4. Express the following numbers in terms of their prime factors.

a) 300 1mk

b) 196 1mk

c) 72 1mk

5. Test whether 83472 is divisible by;

a) 2 1mk

b) 3 1mk

c) 4 1mk

6. What is the greatest mass that can be taken in an exact number of times from 144 g, 216g and 126 g? 3mks

7. The GCD of two numbers is 12 and their LCM is 240. If one of the numbers is 60, find the other number. 3mks

8. If $x = -2$, $y = -6$ and $z = 4$, find the value of; 3mks

$$\frac{4xy}{z}$$

9. Express $0.7^0 3^0$ as a fraction 3mks

10. In a mathematics test, six pupils obtained the following scores; 40, c, 20, d, e and f. find their average score. 3mks

11. 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. 3mks

12. Ten men working six hours a day take 12 days to complete a job. How long will it take eight men working 12 hours a day to complete the same job? 3mks

13. An arc of a circle subtends an angle 60° at the centre of the circle. Find the length of the arc if the radius of the circle is 42 cm. (take $\pi = 22/7$) 3mks

14. How many square tiles of side 15 cm are needed to cover the floor of a room which is 45 m long and 20 m wide? 3mks

15. Find the surface area of a building block measuring 9 cm by 12 cm by 4 cm. 3mks

16. On a certain day, a student measured the temperature inside a deep freezer and found that it was -3°C while the room temperature was 24°C . What was the temperature difference between the room and the deep freezer? 3mks

17. A dress which was costing sh. 1200 now goes for sh. 960. What is the percentage decrease? 3mks.