**GATITU MIXED SECONDARY SCHOOL**

**MATHEMATICS FORM 2 END TERM CAT 1 TERM 3 2014**

**TIME: 1 ¼ HRS**

1. Evaluate using logarithm tables. 3mks

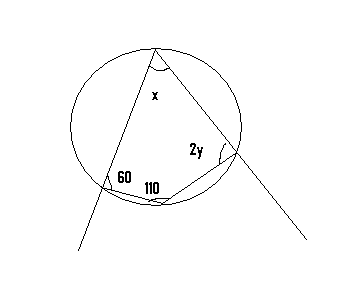
(79.36)3

8.2 × (9.2)2

1. Without using tables or calculators, evaluate 3mks

Log 6 ¼ + log 1 3/5

1. A straight line (L1) has a gradient of - ½ and passes through the point p (-1, 3). Another straight line (L2) passes through the point Q(1,-3) and R(4,5).find
2. The equation of the line one(L1) 2mks
3. The gradient of line two (L2) 2mks
4. The equation of the line two(L2) 2mks
5. The equation of a line through R parallel to (L1) 2mks
6. The equation of a line passing through a point S (0,5) and perpendicular to L2. 2mks
7. When 55 is added to a certain number and the sum is divided by 3, the result is 4 times the original number. What is the original number? 2mks
8. Six cows and five sheep cost ksh. 15, 7500. Five cows and four sheep cost ksh. 131,000. Find the cost of one cow and two sheep. 4mks
9. Okeyo and Koech contributed sh. 120,000 and sh. 140,000 respectively to stat a business. They agreed that 25% of the profit will be shared equally, 25% of the profit will be shared in the ratio of their contributions, and 50% will be retained in the business. In the first year, the profit from the business amounted to sh. 195,000.
10. How much did each receive? 6mks
11. How much was retained in the business? 2mks
12. Okeyo bought dairy cows with his share of the profit. How many cows did he buy if they cost sh. 16,000 each? 2mks
13. Two translations T1and T2 are represented by the vectors 3 and 3 respectively. If L is the point (4,5), find -1 -2
14. The image of L under T1 1mk
15. The image of L under T2 1mk
16. The image of L under T1 followed by T2 1mk
17. Find the value of X and Y 2mks

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1. Calculate the radius of a sphere whose volume is 259cm3 (take II=3.142) 3mks