**GATITU MIXED SECONDARY SCHOOL**

**FORM TWO**

**Mathematics**

1. Use factor method to get the cube root of the following numbers (2marks)

a) 729 b) 4096

2. Using tables find the cube root of

a) 39.304

b) 0.8159

3. Using tables find the reciprocal of (2marks)

a) 9.286

b) 225.3

4. Use the reciprocal and square root tables to evaluate (3 marks)

2 + (3.469)2

40.71

5. Simplify

a) a2 × a4

a2 × a2 × a3

b) 7294 3  × (1 243)-2 5 ÷ 271 3

6. Find the values of the unknown

125x + 1 – 53x – 5 = 615

7. a) The sum of interior angles of a regular n sided polygon is 1080.

1. Find the size of each interior angle of the polygon. (2 marks)
2. What is the name of the polygon? (1 mark)
3. How many sides does it have? (1 mark)

8. Use a ruler and a pair of compasses only to construct a triangle ABC in which AB=7.5cm BC=6cm and AC=4.5cm

a) Measure the angles of the triangle (4 marks)

9. Ali travels a distance of 5km from village A to village B in the bearing 0600. He then changes course and travels a distance of 4km in the bearing of 1350 to village C. Find by scale drawing

a) The distance in km between A and C

b) The bearing of A from C

10. The table below shows information from Kahawa Surveyor’s field book. Draw the map of the field hence calculate its area in hectares. Measurements are in metres and AB = 700 m

|  |  |  |
| --- | --- | --- |
|  | B |  |
| Q40 | 500 |  |
|  | 450 | D 50 |
| M 100 | 300 |  |
| F 80 | 250 |  |
|  | 150 | T 100 |
|  | 50 | C 40 |
|  | A |  |