NAME:……ADM:…….

MATHEMATICS
FORM 2
TIME: 1 HOUR 15 MINS

1. Use tables to evaluate. (3mks)

$$\sqrt{\left(\frac{3.45 \times 16.7}{31.5}\right)}$$

2. Solve for x in each of the following equations. (3mks)
   (a) $3^{(2x-5)} = 27$

   (b) $3^{4x} \div 3^{-7} = 3^{15}$ (3mks)

3. Use reciprocals tables to evaluate (3mks)

4. A metallic cuboid measuring 16cm by 8cm by 4 cm was melted . The material was then used to make a cube. What was the length of the cube? (3mks)

5. Simplify

$$\sqrt{\frac{27x^3y^9}{X^6y^3}}$$ (3mks

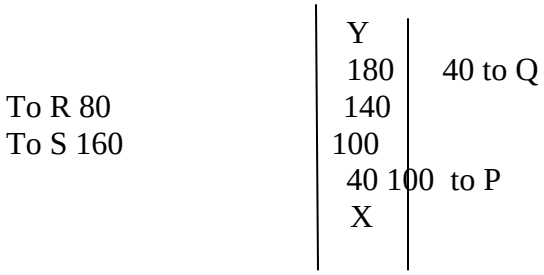
6. Find the equation of the line through the points A (2, 5) and B(3, 11) (3mks)

7. Determine the equation of the line perpendicular to the line whose equation is y=-5x+3 and passes through the point (3, 2). (3mks)

8. A(-5, -2), B(-2, -5) and C(-12, -2) are vertices of a triangle. Find the image of the triangle when it is reflected in :
   (a) The line y=-x (4mks)

   (b) The line y= x (4mks)

9. Find the area in hectares of a coffee filed whose measurements are entered in a filed book as shown below. Take xy=200m as the baseline. (8mks)



10. Use the reciprocal tables and square root to evaluate. (4mks)

$$\frac{0.1}{0.0351} + \sqrt{0.498}$$

11. Two mean each working for 8 hours a day. Can cultivate an acre of land in 4 days. How long would 6 men each working in 4 hours a day take to cultivate 4 creas? (3mks)

12. The sum of interior angles of a regular polygon is 1080^{o}. Find the size of each exterior angle. (3mks)