GATITU SECONDARY SCHOOL, P.O. BOX 327 – 01030, GATUNDU.
FORM 3 MATHEMATICS. TUNE UP EXAMINATION.

1.   Simplify the following expression.   (4mks

$$\frac{3X^2 - 4Xy + y^2}{9X^2 - y^2}$$

2.   Find the value of X which satisfy the equation $5^{x2} - 6 \times 5^x + 5 = 0$ (4mks

3.   The length of a room is 4 metres longer than its width. Find the length of the room if its area is $32m^2$

4.   The equation of a line is $-3/5 x + 3y = 6$
      Find the:- (a) Gradient of the line   (1mk

b)   Equation of a line passing through points (1, 2) and perpendicular to the given line.
      (3mkss

5.   Find the range of X if:-
      2   3 - x   5   (2mks

6.   Solve the following in equalities and represent the solutions on a number line.
      3 – 2x   5   (3mks
      4 - 3x   - 8

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7. The interior angles of a hexagon are $2x°$, $\frac{1}{2}x°$, $x° + 40°$, $110°$, $13°$, and $160°$. Find the value of the smallest angle. (3mks

8. In the figure below, O is the centre of the circle A B C D and A O D is a straight line.

If AB = BC and angle OAC 40°, Calculate angle BAC   (3mks

9.   A shirt whose marked price is sh 800 is sold to a customer after allowing him a discount of 13%, If the trader makes a profit of 20%, Find how much the trader paid for the shirt. (4mks

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