Class X Self Assessment Test Mathematics Marks : 20

1. Solve the following Quadratic Equation:
   $x^2 - 7x + 3 = 0$
   Give your answer correct to two decimal places. [4]
2. Without solving the following quadratic equation , find the value of "*k* " for which the roots are equal.
   $x^2 + 2(k-1)x + (k+5) = 0$ [4]
3. By selling a chair for Rs 75 , Rohit gained as much percent as its cost. Calculate the cost of the chair. [4]
4. Solve the following inequation and represent the solution set on the number line.
   $\frac{3x}{5} + 2 < x + 4 \leq \frac{x}{2} + 5$, $x \in R$ [4]
5. Given :
   $A = \{x : 11x - 5 > 7x + 3, x \in R\}$
   $B = \{x : 18x - 9 > 15 + 12x, x \in R\}$
   Find the range of set $A \cap B$ and represent it on number line
   [4]