

Assignment 1

Class – 9th

Chapter – 1 (Number Systems)

- Express the following numbers in the form of $\frac{p}{q}$:
 - 25.6875
 - 0.621621621..
 - 15.712121212..
- Write one rational & one fractional number between 0.515115111.... and 0.535335333....
- Write one example each of two irrational numbers whose:
 - Sum is a rational number
 - Product is an irrational number
 - Difference is an irrational number
 - Quotient is a rational number
- Simplify : $[\{ (625)^{-1/2} \}^{-1/4}]^2$
- Find the value of x if $2^{x-7} \times 5^{x-4} = 1250$
 - Find the value of x and y if:
 $3^{x-1} = 9$ & $4^{y+2} = 64$
- Find the value of a & b if $\frac{5 + 2\sqrt{3}}{7 + 4\sqrt{3}} = a + b\sqrt{3}$
- If $x = 3 + \sqrt{8}$, then find the value of $x^2 + \frac{1}{x^2}$.