

Class - X  
Worksheet

Ch - Real no's . Polynomials &  
Linear Equation in 2 variables

- Q1 Show that there is no positive integer  $n$ , for which  $\sqrt{n-1} + \sqrt{n+1}$  is rational.
- Q2 For any positive integer  $n$ , prove that  $n^3 - n$  is divisible by 6.
- Q3 Prove  $\sqrt{p}$  is irrational.
- Q4 Write whether the square of any positive integer can be of the form  $3m+2$ , where  $m$  is a natural number, justify your answer.
- Q5 Prove that one of any three consecutive integers must be divisible by 3.
- Q6 Show that square of any positive integer is of the form  $8m+1$ , for some integer  $m$ .
- Q7 At an airport planes take off from five different runways at 3, 4, 8, 12 and 15 minutes interval. At 7:30 am, planes take off from all 5 runways simultaneously when will five planes take off together again.
- Q8 Find the greatest number of 6 digit which is exactly divisible by 24, 15 and 36.