

CLASS XI-PHYSICS
BASIC MATHEMATICS

ASSIGNMENT-1

NUMERICAL QUESTIONS:

Q.1 If $y = 4x^2 - 4x + 7$. Find the minimum value of y .

Q.2 If $y = x^3 - 3x$. Find the maximum value of y .

Q.3 If $y = x^3 - 3x$. Find the value of x at which we get minimum value of y .

Q.4 Position of a particle moving along a straight line is given by $x = 2t^2 + t$. Find the velocity at $t = 2$ sec.

Q.5 If velocity of a particle is given by $v = 2t - 1$ then find the acceleration of particle at $t = 2$ s.

Q.6 Find $\frac{\int_0^{\pi/2} \sin x \, dx}{\int_0^{\infty} e^{-x} \, dx} = 1$

Q.7 Position of a particle moving along a straight line is given by $x = 2t^2 + t$. Find the velocity at $t = 2$ sec.

Q.8 If velocity of a particle is given by $v = 2t - 1$ then find the acceleration of particle at $t = 2$ s.
 m/s^2