

Answer on Question #73837 – Math – Calculus

Question

Estimate the instantaneous rate of change of

$y(t)=3t^2+1$ at the point $t=-1$

Solution

$$y = 3t^2 + 1, \quad \frac{dy}{dt} = 6t, \quad \frac{dy}{dt} \Big|_{t=-1} = 6(-1) = -6.$$

Answer: -6.