



Department of Physics

Physics 161, Calculus Mechanics and particle dynamics
Quiz #1

How is:

1. Mass defined?
2. Time defined?
3. The Meter defined?
4. A moving particle starts at an initial position $\vec{r}(0) = \langle 2, 5, 4 \rangle$ with initial velocity $\vec{v}(0) = \langle 1, -1, 1 \rangle$. Its acceleration is $\vec{a}(t) = \langle 6t, 4t, 2 \rangle$. Find its velocity and position at time t .