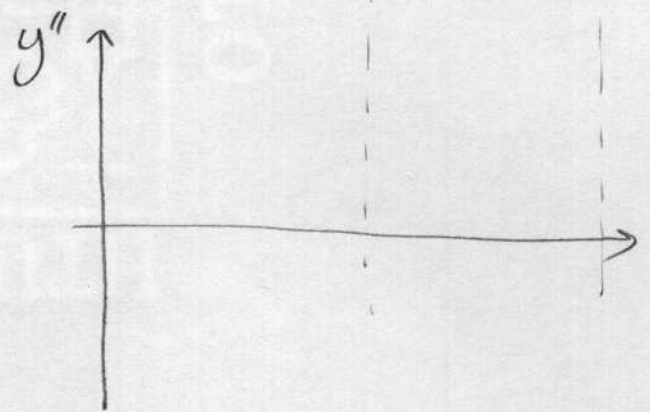
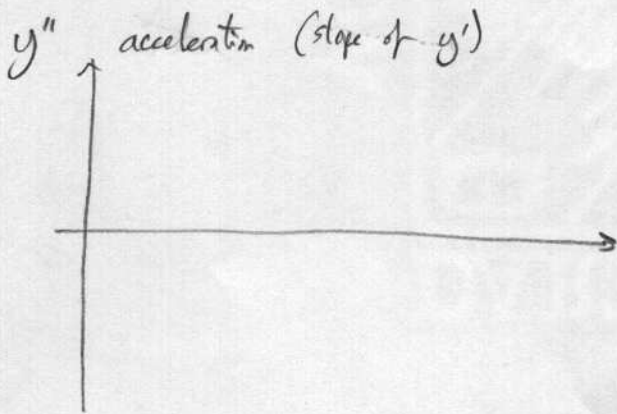
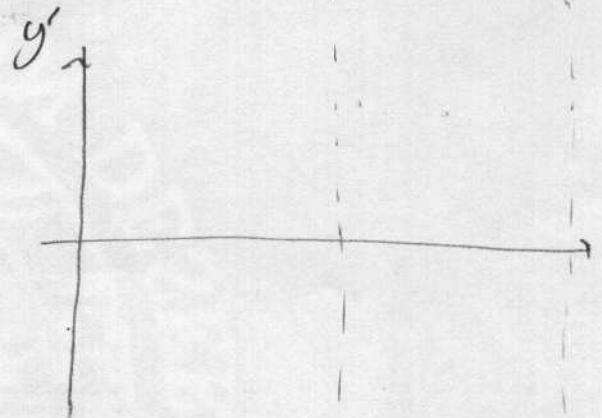
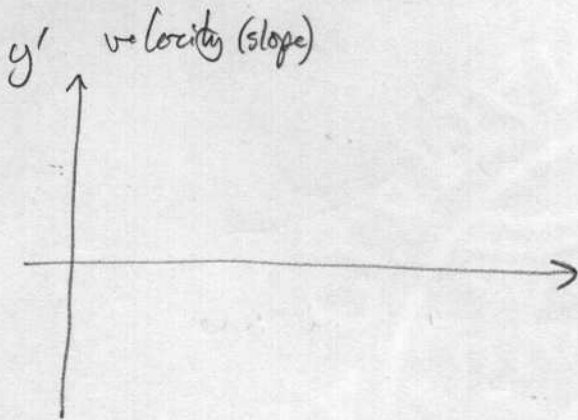
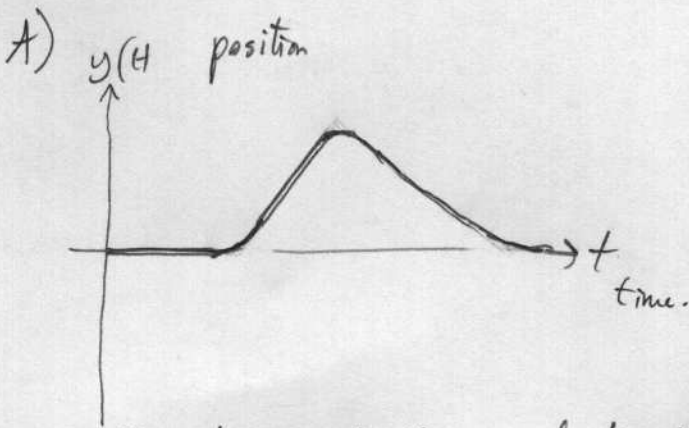


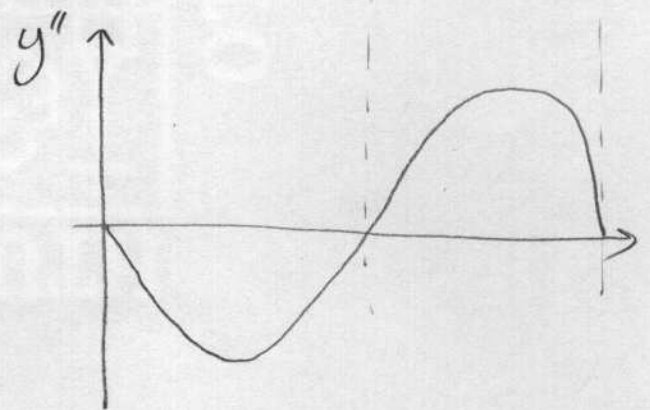
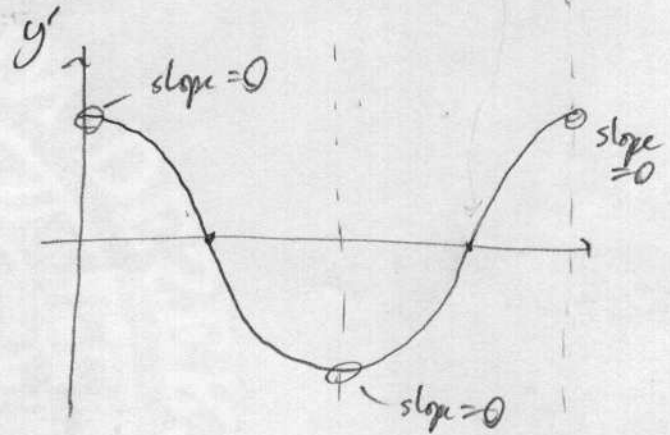
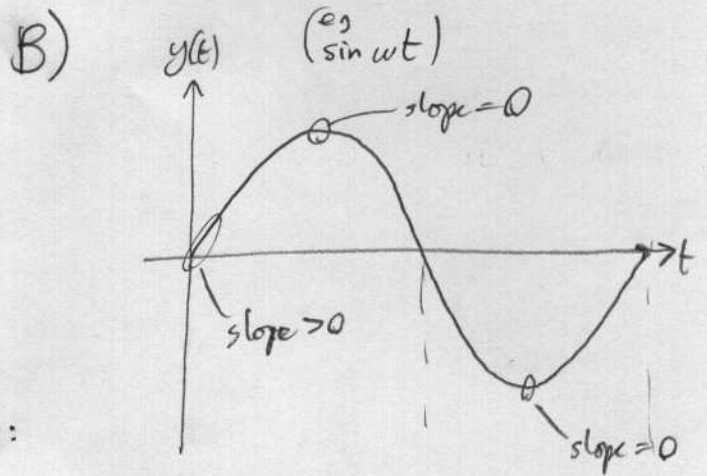
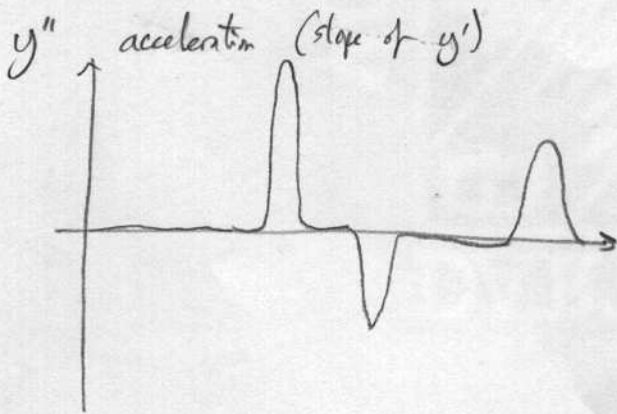
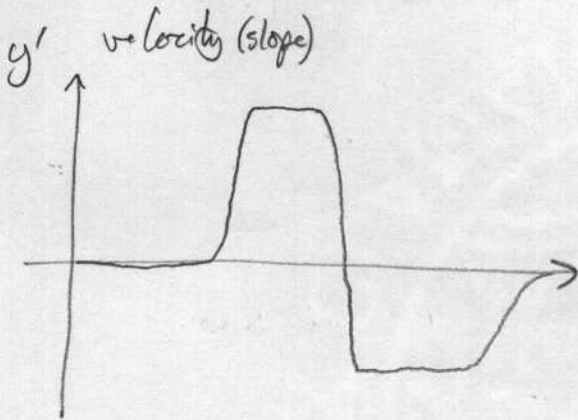
Draw in the slope and the acceleration below:



Do you think $\sin \omega t$ has a larger or smaller accel. if ω made larger?



Draw in the slope and the acceleration below:



notice looks like $-\sin t$ if $y = \sin t$.

Do you think $\sin \omega t$ has a larger or smaller accel. if ω made larger?

since $\sin \omega t$ changes more rapidly when ω large, expect velocity & acceleration are correspondingly larger (in fact $y'' = -\frac{\omega^2 \sin \omega t}{\omega}$ large.)