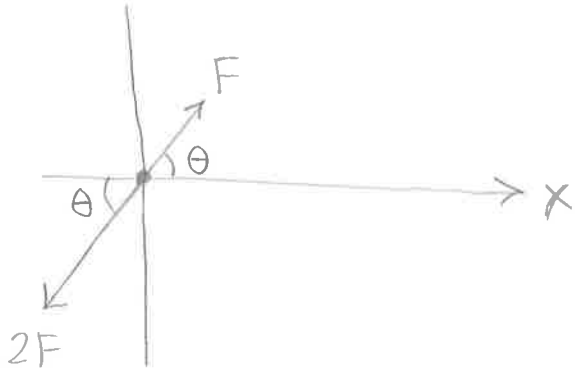
Quiz

An object of mass m is free to move without friction on a wire that is fixed to lie on the x axis. If the object is subjected to two external forces shown below, what is its acceleration along the x axis?



(a) $\frac{1}{m} F\cos\theta$

(b) $-\frac{1}{m} F\cos\theta$

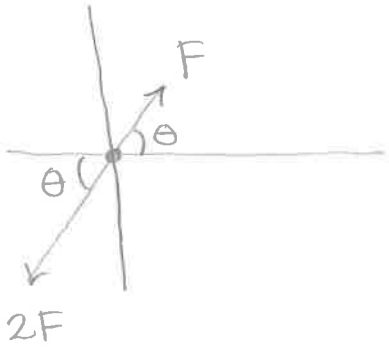
(c) $mF\cos\theta$

(d) $-mF\cos\theta$

(e) None of above

Quiz

If the object above is released from rest at the origin at time $t=0$, what will be the object's position at any later time t along the x-axis?



(a) $F\cos\theta\, t^2$

(b) $-F\cos\theta\, t^2$

(c) $\frac{1}{2} F\cos\theta\, t^2$

(d) $-\frac{1}{2} F\cos\theta\, t^2$

(e) None of the above