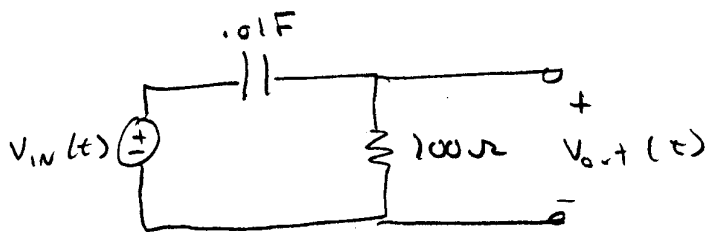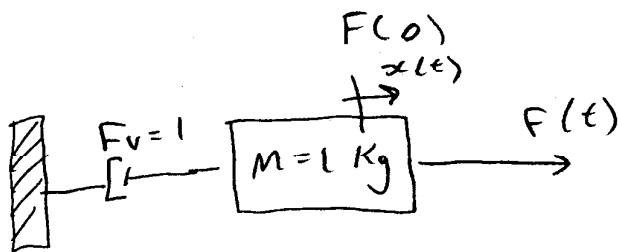[5 pk] a)   Find the   Transfer   Function

$$\frac{V_{out}(s)}{V_{IN}(s)}$$

$$G(s) = \frac{100}{\frac{1}{.01\,s} + 100} = \frac{s}{s+1}$$

[5 pts] b) Find the transfer Function

$$\frac{X(s)}{F(s)}$$

$$G(s) = \frac{1}{s(s+1)}$$