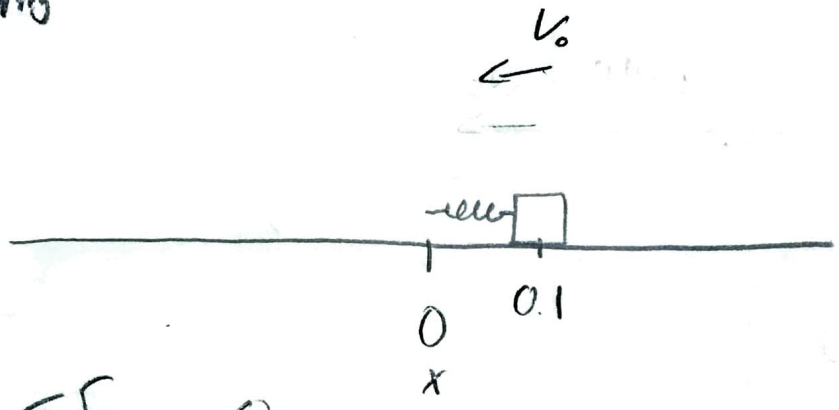
$m = 1$ kg $V_0 = -0.4$ m/s $X_0 = 0.1$ m

$K = 100$ $C = 0.2$

Spring



X = Position

$\dot{X}$ = velocity

$\ddot{X}$ = acceleration

$$\Sigma F_x = 0$$

$$m\ddot{X} = -KX - C\dot{X}$$

$$\ddot{X} = -\frac{K}{m}X - \frac{C}{m}\dot{X}$$