$$\vec{F} = m\vec{a} = m\frac{d^2\vec{x}}{dt^2}$$

$$m\frac{d^2\vec{x}}{dt^2} = -k\vec{x}$$

$$\frac{d^2\vec{x}}{dt^2} = -\left(\frac{k}{m}\right)\vec{x}$$