

The momentum of an object is described

by 
$$\vec{p}(t) = (7.0t)\vec{i} + (3.0)\vec{j} + (4.0t^2 - t)\vec{k}.$$

Write an equation for the force acting on the object.

$$\frac{d\vec{p}(t)}{dt} = \vec{F}(t)$$

$$\vec{F}(t) = (7.0)\vec{i} + (8.0t - 1)\vec{k}$$