Find the cross-product and the dot-product for all combinations of the following vectors...

$$\vec{a} = 3\hat{\imath} + 5\hat{\jmath} - 2\hat{k}$$

$$\vec{b} = -\hat{\imath} + 7\hat{k}$$

$$\vec{c} = 2\hat{\imath} - \hat{\jmath} + 2\hat{k}$$

.

A particle has an initial velocity of $v_o = \left(+5.00\,\frac{m}{s}\right)\hat{x}$ in a uniform field of $B_o = \left(-2.00\,\frac{m}{s}\right)\hat{y}$.

Describe the velocity of the particle as a function of time.