

$$\vec{A} = -2\hat{x} + 3\hat{z} - 4\hat{y}$$

$$\vec{B} = -\hat{y} + 2\hat{x}$$

$$\vec{C} = 5\hat{x}$$

a) Do **DOT** product:  $\vec{A} \cdot \vec{B}$ . **Show your work in detail, step by step**

b) Do **CROSS** product:  $\vec{A} \times \vec{B}$ . **Show your work in detail, step by step**

c) Find the angle between B and C, **Show your work in detail, step by step**