

$$\vec{A} = -2\hat{y} - \hat{x} + 5\hat{z}$$

$$\vec{C} = -\hat{z} + 2\hat{y}$$

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

a) The component of \vec{A} that is parallel to B is defined as $\vec{A}_{\text{comp of A parallel to B}} \rightarrow \vec{A}_{\parallel} = \frac{\vec{A} \cdot \vec{B}}{|\vec{B}|} \frac{\vec{B}}{|\vec{B}|}$

b) Do $\vec{C} \times \vec{B}$ and show your detailed work!!!!

c) what is the area of the parallelogram that \vec{C} and \vec{B} make