EECS 221

S.P. 2-A

If $\mathbf{A} = 4\hat{\mathbf{a}}_x + 2\hat{\mathbf{a}}_y - 4\hat{\mathbf{a}}_z$ and $\mathbf{B} = -4\hat{\mathbf{a}}_x - 2\hat{\mathbf{a}}_y - 4\hat{\mathbf{a}}_z$, find:

a) $|\mathbf{A}|$

b) $|\mathbf{B}|$

c) $\mathbf{A} + \mathbf{B}$

d) $\mathbf{A} - \mathbf{B}$

S.P. 2-B

If $\mathbf{A} = -\hat{\mathbf{a}}_x + 2\hat{\mathbf{a}}_y - 3\hat{\mathbf{a}}_z$ and $\mathbf{B} = 2\hat{\mathbf{a}}_x - 3\hat{\mathbf{a}}_y - \hat{\mathbf{a}}_z$, find:

a) $|\mathbf{A}|$

b) $|\mathbf{B}|$

c) $\mathbf{A} \times \mathbf{B}$

d) $\mathbf{A} \bullet \mathbf{B}$

e) The minimum angle θ_{AB} between $\mathbf{A}$ and $\mathbf{B}$