

**Special Problem 2-4.17**

The relative **directions** of a vector  $\mathbf{C}$  and base vectors  $\hat{\mathbf{a}}_1$  and  $\hat{\mathbf{a}}_2$  are shown in the diagram below.

The magnitude of vector  $\mathbf{C}$  is  $|\mathbf{C}| = 2\sqrt{3}$

Express vector  $\mathbf{C}$  in terms of base vectors  $\hat{\mathbf{a}}_1$  and  $\hat{\mathbf{a}}_2$ .

