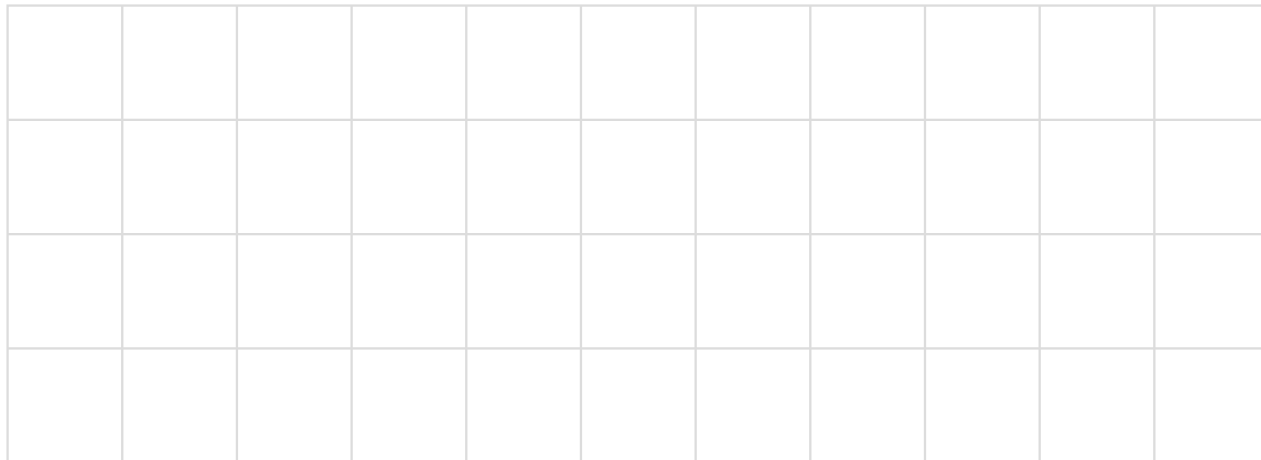


Vectors

1 Problem I

A vector $\vec{\mathbf{F}}$ has a magnitude of 2 and makes an angle of 30° with the x -axis (with positive rotation counterclockwise).

1. Draw $\vec{\mathbf{F}}$.
2. Write $\vec{\mathbf{F}}$ in the form $F_x\hat{\mathbf{i}} + F_y\hat{\mathbf{j}}$.



2 Problem II

Given $\vec{\mathbf{F}} = 3\hat{\mathbf{i}} - 4\hat{\mathbf{j}}$,

1. Draw $\vec{\mathbf{F}}$.
2. Compute F .
3. The angle $\vec{\mathbf{F}}$ makes with respect to the x -axis (with positive rotation counterclockwise).

