## 11C Magnitude and Direction

1. Find the magnitude of the vector: $3 \mathbf{i}-7 \mathbf{j}$
2. Find the angle between the vector $-4 \mathbf{i}+5 \mathbf{j}$ and the positive $x$-axis
3. Vector a has magnitude 10 and makes an angle of $30^{\circ}$ with $\mathbf{j}$. Find a in column vector format.
