*2–56. If the magnitude of the resultant force acting on the bracket is to be 450 N directed along the positive u axis, determine the magnitude of \mathbf{F}_1 and its direction ϕ .

2–57. If the resultant force acting on the bracket is required to be a minimum, determine the magnitudes of ${f F}_1$ and the resultant force. Set $\phi=30^\circ.$

Problems 2-56/57

