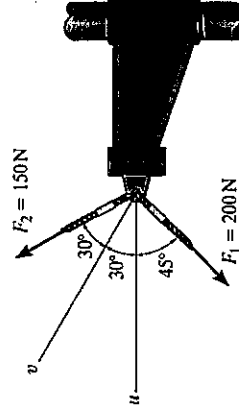
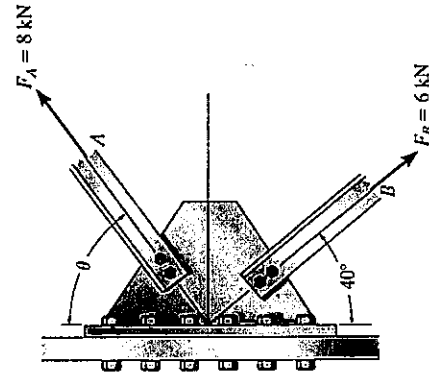


Week 1 Homework problems

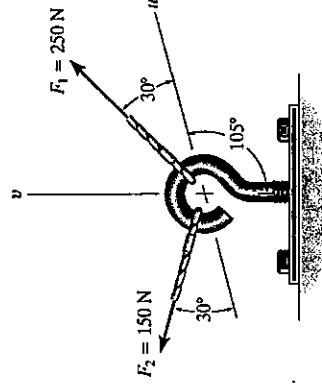
- 2a Determine the magnitude of the resultant force acting on the bracket and its direction measured counterclockwise from the positive u axis.



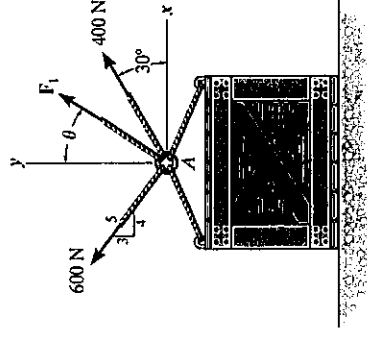
- 2.15 The plate is subjected to the two forces at A and B as shown. If $\theta = 60^\circ$, determine the magnitude of the resultant of these two forces and its direction measured clockwise from the horizontal.



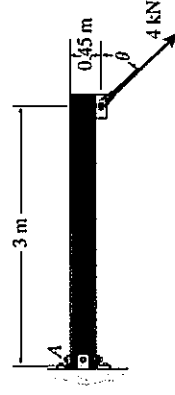
- 2.9 Resolve F_1 into components along the u and v axes and determine the magnitudes of these components.



- 2.51 Determine the magnitude and direction measured counterclockwise from the positive x axis of the resultant force of the three forces acting on the ring A . Take $F_1 = 500$ N and $\theta = 20^\circ$.



- 4a If $\theta = 45^\circ$, determine the moment produced by the 4-kN force about point A .



- 4b The member is subjected to a force of $F = 6$ kN. If $\theta = 45^\circ$, determine the moment produced by F about point A .

