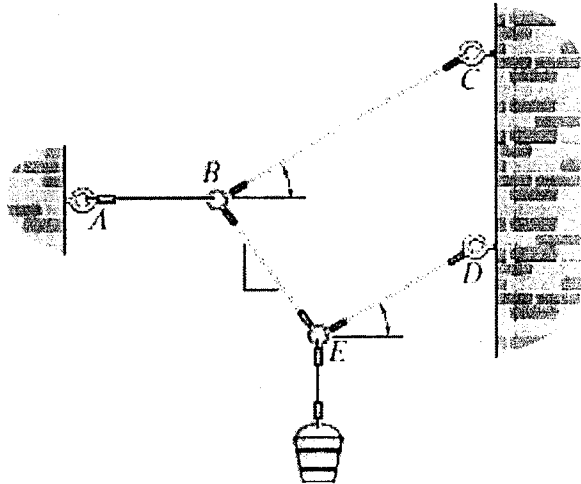
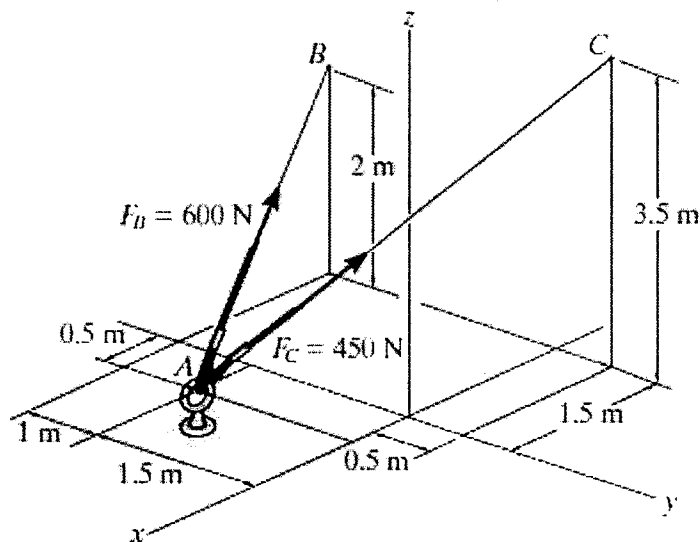


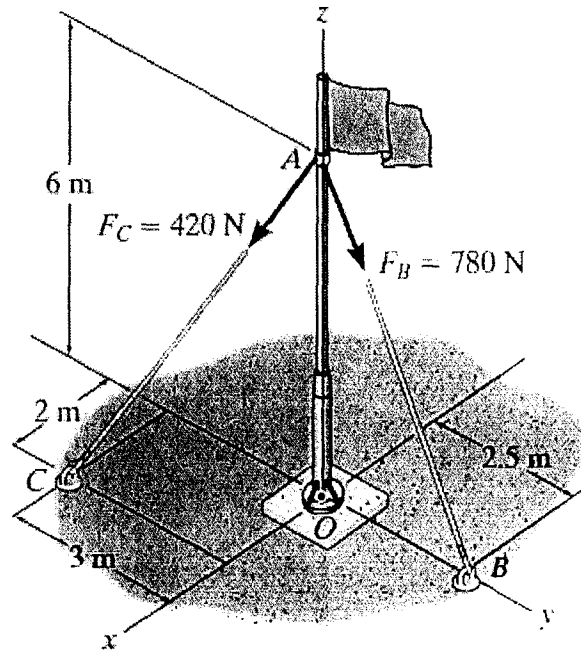
1-Determine the maximum weight of the bucket that the wire system can support so that no single wire develops a tension exceeding 100 lb. (13 Marks)



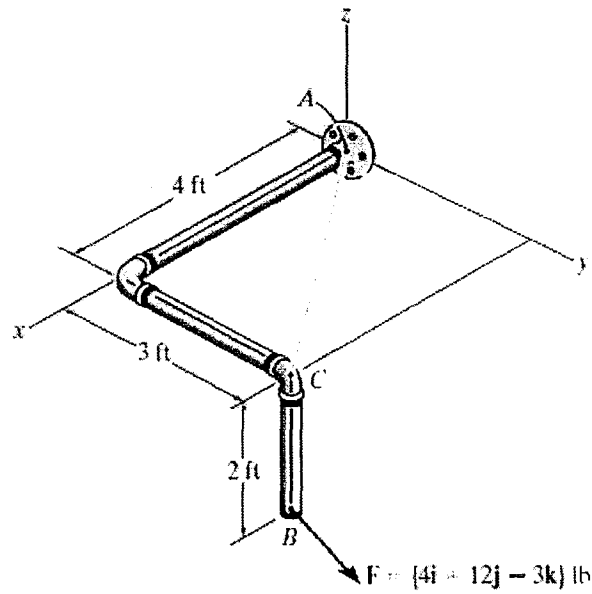
2- Determine the magnitude and coordinate direction angles of the resultant force acting at A. (13 Marks)



3-Determine the resultant moment produced by forces  $F_B$  and  $F_C$  and about point O. Express the result as a Cartesian vector. (13 Marks).



4- Determine the moment of the force  $F$  about an axis extending between  $A$  and  $C$ . Express the result as a Cartesian vector (13 marks ).



مع أطيب التمنيات بالتوفيق و النجاح