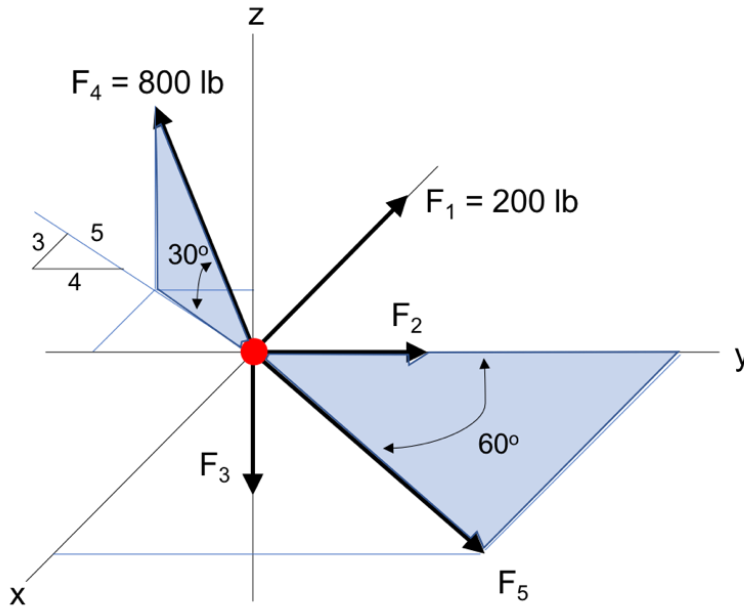
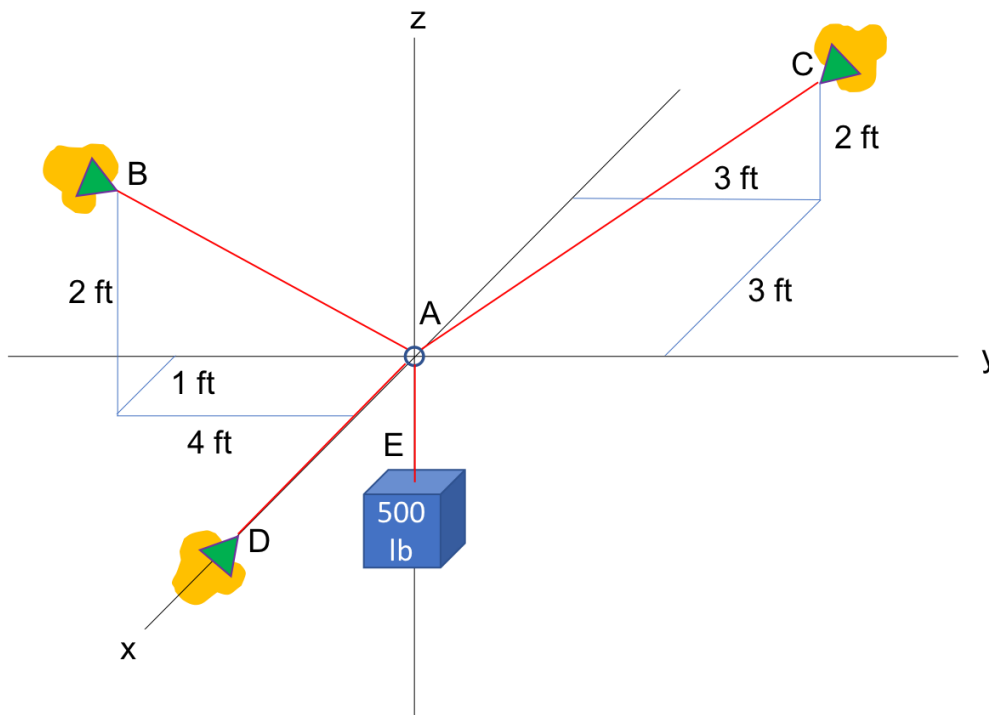


- The particle is in equilibrium and is subjected to the five forces shown. F_1 , F_2 , and F_5 lie on the x - y plane. Determine the magnitude of F_2 , F_3 and F_5 .



- Cables AB, AC, and AD are used to support a 500 lb. crate. The cables are connected to the wall at B, C and D. Determine the force in each cable.



3. Cables AB and AD, spring AC and a 100-kg crate are all attached to a ring at point A. Cable AD and spring AC lie on the x-y plane. Cable AB lies on the y-z plane. The cables and the spring are connected to the wall at B, C, and D.
- Draw a FBD of the ring at A
 - Determine the force in the cables and the spring
 - Determine the unstretched length of the spring

