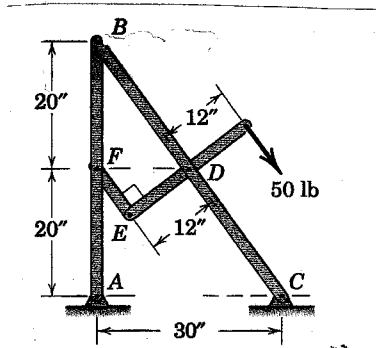


- 12A. For the frame shown below,
- determine the forces acting on members ABF and BCD.
 - After working part (a), draw FBD's of members ABF and BCD showing the forces acting in their CORRECT directions.



- 12B. For the position shown, the ground is applying a 20 kN horizontal force on the tip of the bucket.
- Determine the forces acting at pins B and E **due** to the arm BAO and the hydraulic cylinder ED.

