

Homework H02 – Comments

ME 323 – Su 2025 – cmk

- Pin joints, built-in connections at walls and other physical constraints should NOT be part of your FBDs. The reaction force/couples represent the influence of these constraints on the members of the structure. Recall that the “F” in “FBD” stands for “free”; that is, you cut the member “free” from its constraints and replace those physical constraints with the appropriate forces and couples.
- It is recommended that you draw the FBDs of the joints in a truss showing all members as being in tension. With that choice, if: 1) the member force is positive, then the member is in tension, or 2) the member force is negative, then the member is in compression. It is generally not worth your effort to reason out tension or compression in a member at the start when drawing the FBDs. Let the math tell you that answer in the end.