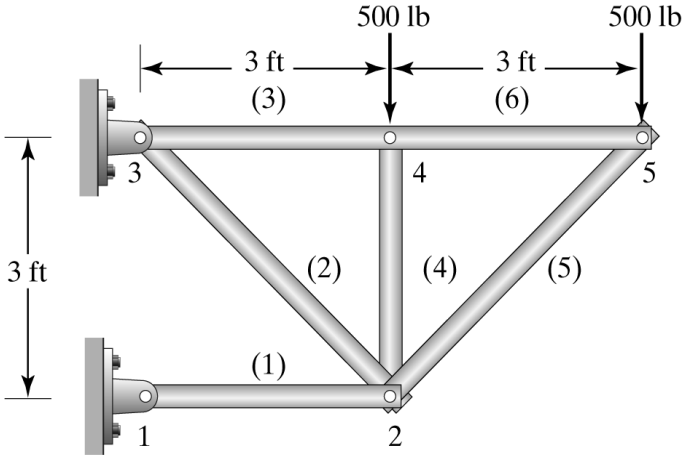
Trusses: Overview of ANSYS

Note: LINK180 replaces LINK1, LINK8, and LINK10.

Example #1

All the members of the balcony truss shown in the figure are made of Douglas-fir wood with a modulus of elasticity of $E = 1.90 \times 10^6$ lb/in^2 and a cross-sectional area of 8 in^2. Determine the deflection of each joint, the force and stress in each member, and the reaction forces.



Example #2

The members of the truss shown in the accompanying figure have a cross-sectional area of 2 in^2 and are made of structural steel ($E = 30.0 \times 10^6$ lb/in^2). Determine the deflection of each joint, the stress in each member, and the reaction forces.