Chapter 6. Structures in Equilibrium

Section 6.1. Trusses

Definition. A *truss* is a series of bars pinned together. The bars are the *members* of the truss and where the bars are pinned together are the *joints*.

Note. The members of a truss are two force members and so the forces acting on them must be equal in magnitude, opposite in direction, and with the same line of action. Such forces are called *axial forces*. Notice that axial forces can either cause compression or tension in a member.

Note. Many structures such as bridges and house frames are *modeled as trusses*. Although the joints are fixed (not pinned), the structures support loads by primarily subjecting the members to axial forces (and assuming the moments are small).

Revised: 9/26/2018