

Example 1.1.3a – The pin-jointed truss structure in Figure 1 carries two vertical forces, 5 kN at joint D and 10 kN at joint E as shown.

- Determine the **degree of redundancy** of the structure.
- Determine the magnitude and sense of the **reaction forces** at both supports.
- Determine the magnitude and sense of the **internal forces** in each of the 7 members.

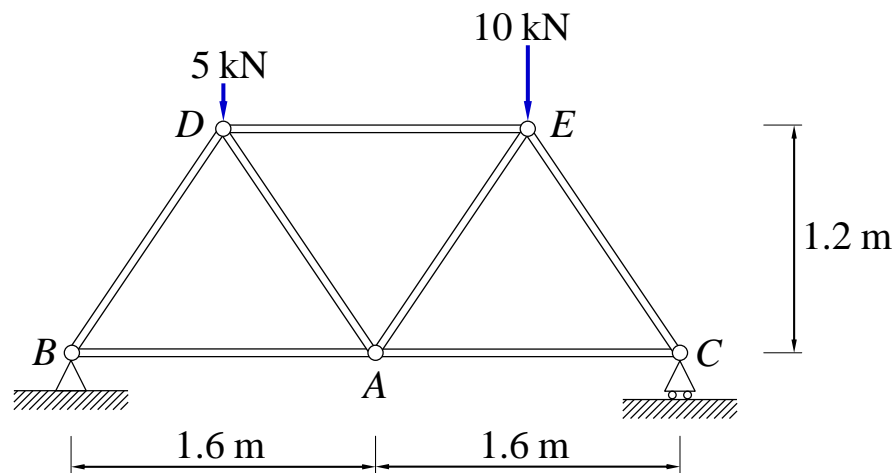


Figure 1: Pin-jointed truss subjected to two vertical forces.

