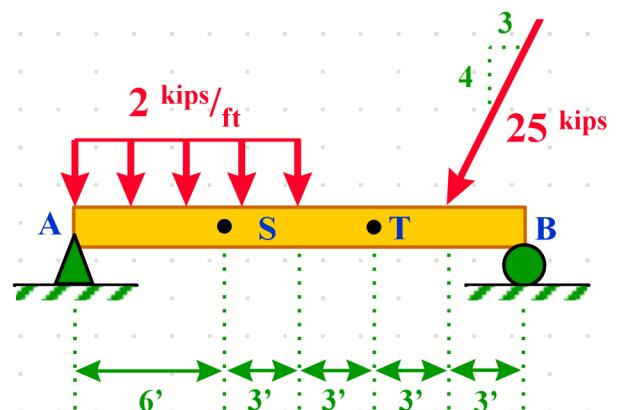


## Worksheet #1A

### Internal Forces

Given: Beam with applied loads as shown.

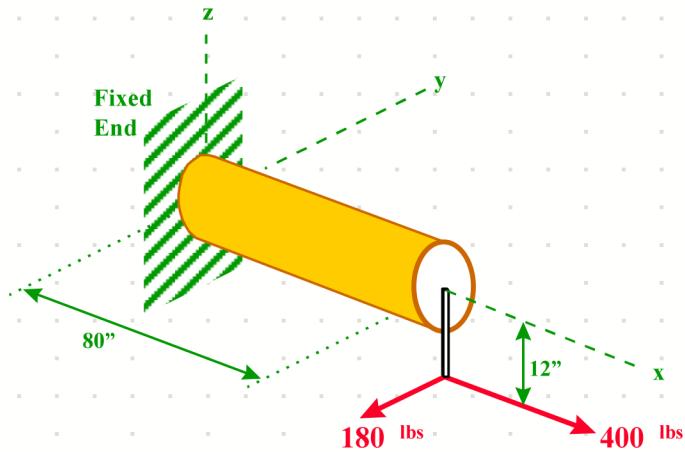
Determine the internal forces on a transverse cross-section through points "S" and "T."



## Worksheet #1B

### Internal Forces

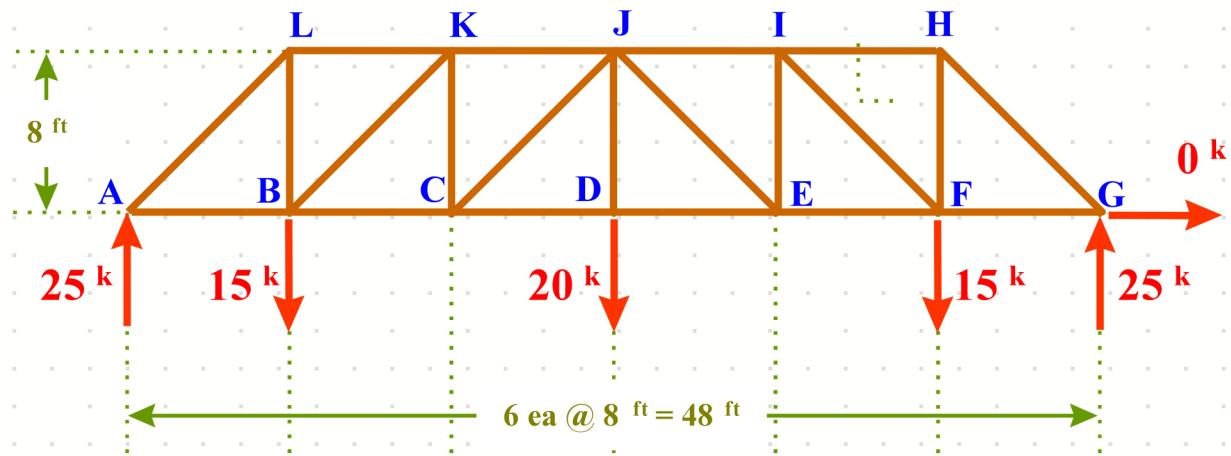
Find the external reactions at the fixed end of the structure shown.



### Worksheet #1C

#### Internal Normal Forces/Stresses

Given: The cross-sectional area of all truss members below is  $4 \text{ in}^2$ . For the loads and reactions shown:



Determine the normal stress on a transverse plane in member IH.



## Worksheet #1D

### Internal Normal Forces/Stresses

Given: Member GF of the pin-connected truss has a cross-sectional area of  $7.4 \text{ in}^2$

Determine the maximum normal stress in GF.

