

# ENGG 202

## March 6 Week 8

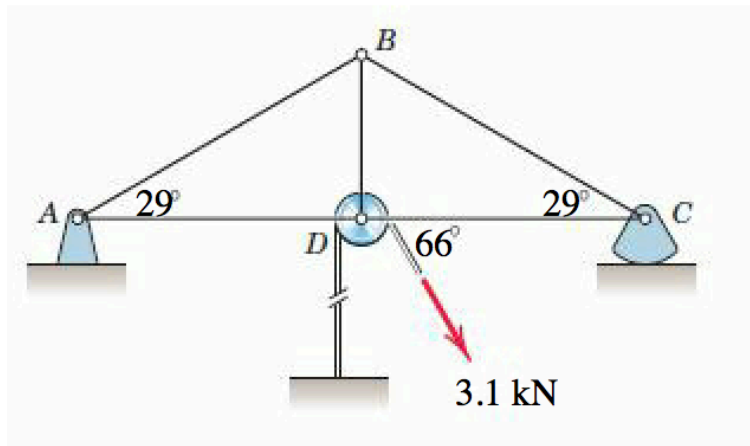
### Problems

## TRUSSES

### RECAP Method of Joints, Statical determinacy.

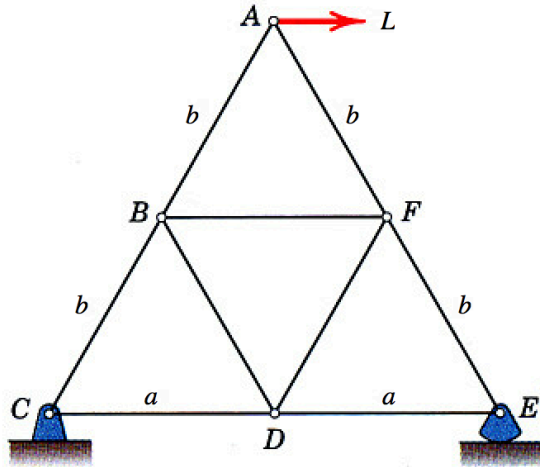
#### Supplemental Problem 4/09

Determine the force in each member of the truss. Forces are positive if in tension, negative if in compression.



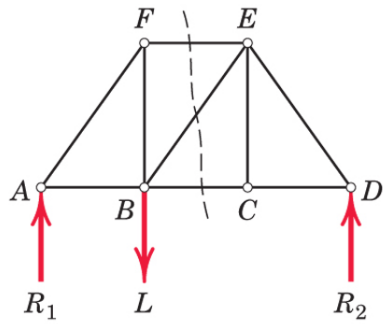
### Supplemental Problem 4/10 (modified)

The truss is loaded and supported as shown. Set  $L = 490\text{ N}$ ,  $a = 420\text{ mm}$ ,  $b = 500\text{ mm}$ . If each member can only support  $400\text{ N}$  in tension and  $600\text{ N}$  in compression, determine if the structure can support the  $490\text{ N}$  load. Forces are positive if in tension, negative if in compression.

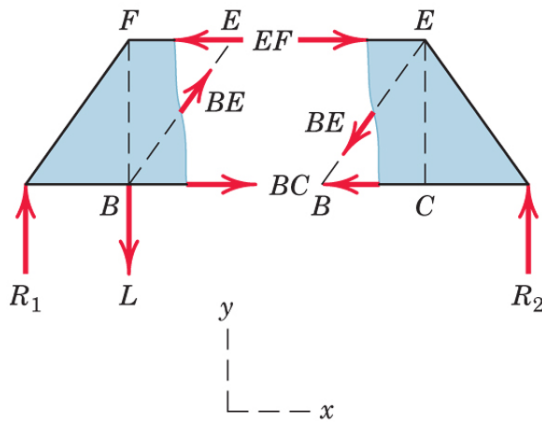


## 4/4 Method of Sections

Introduction about internal forces.



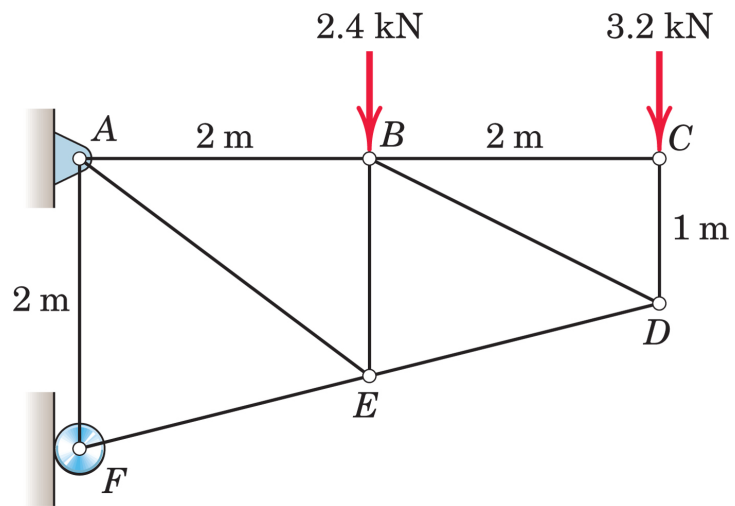
(a)



(b)

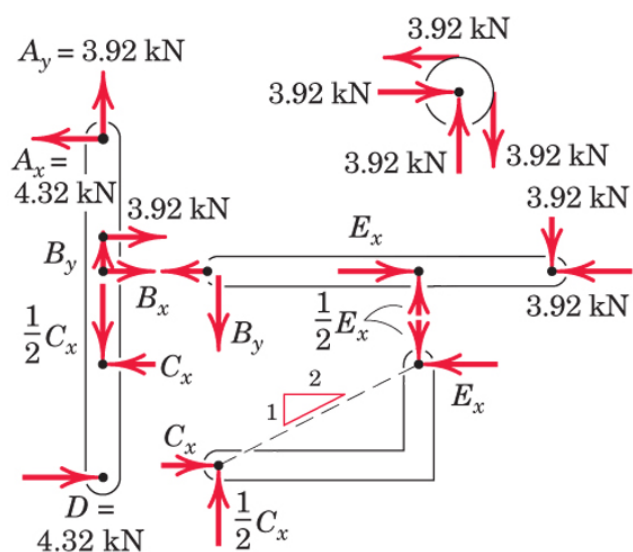
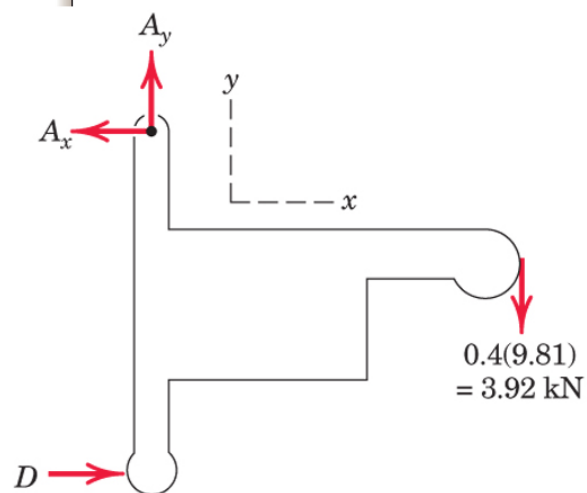
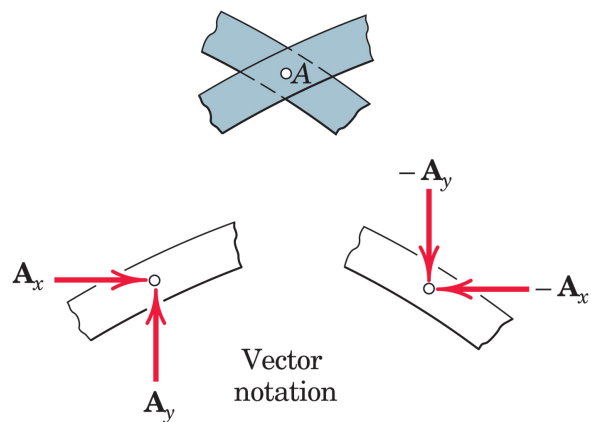
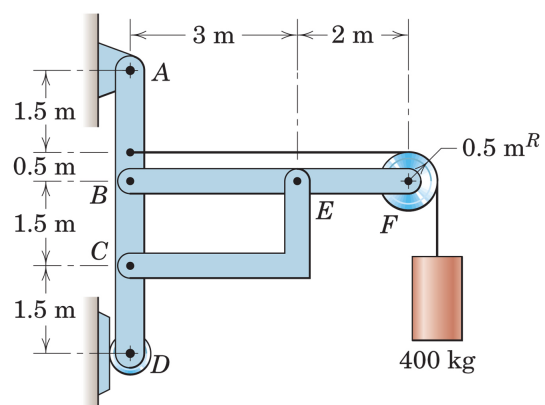
Problem 4/32

Determine the force in member AE of the loaded truss.



## 4/5 Frames and Machines

### Introduction



Problem 4/78

Determine the magnitude of the pin reaction at A, B and C, due to the 6000 lb beam.

