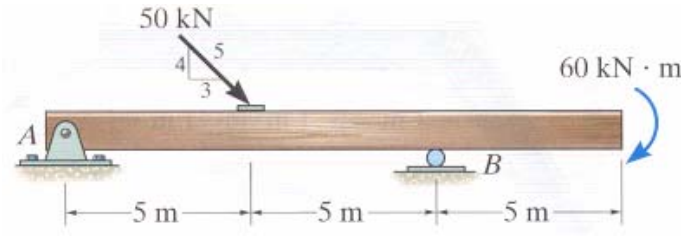
CIE200 Statics/F06 **Test #2** **NAME**_____

PROB-1-(25)



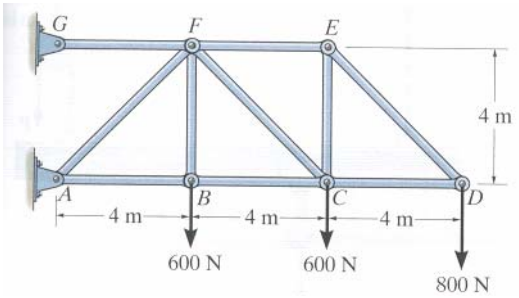
The beam is supported by a roller at *B* and pin at *A*. Determine the reactions at the supports.

$R_B = 26$ KN ↑

$V_A = 14$ KN ↑

$H_A = 30$ KN ←

PROB-2-(25)



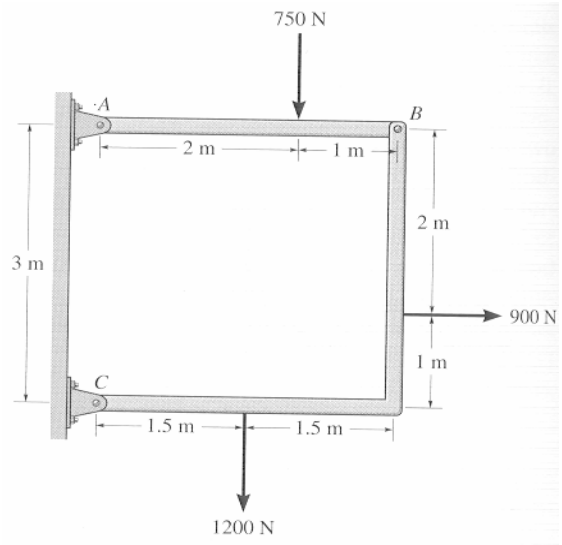
The truss is subjected to the loading shown. Determine the force in members. ED, *AB*, and FC, and indicate whether the members are in tension or compression.

$F_{DE} = 1131.37$ N (T)

$F_{CF} = 1979.\ 90$ N (T)

$F_{BA} = -220$ N (C)

PROB-3-(25)



Determine the horizontal and vertical components of force at pins *A*, *B*, and C of the two-member frame.

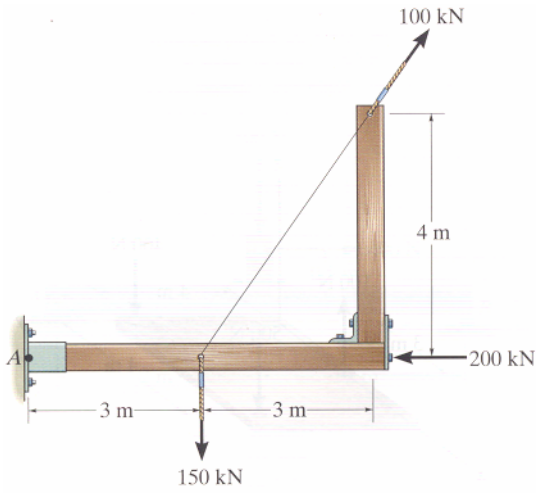
$H_C = 500$ N →

$H_A = 1400$ N ←

$V_C = 1700$ N ↑

$V_A = 250$ N ↑

PROB-4-(25)



Determine the equivalent resultant force and couple-moment system at A replacing the loading shown.

140 KN ←

70 KN ↓

210 KN-m ↻