

Statics Homework Handout 6a:

Homework Assignment #6a: 6.5, 6.10, 6.15, 6.23, 6.43, 6.49, 6.52

6.1 through 6.8 Using the method of joints, determine the force in each member of the truss shown. State whether each member is in tension or compression.

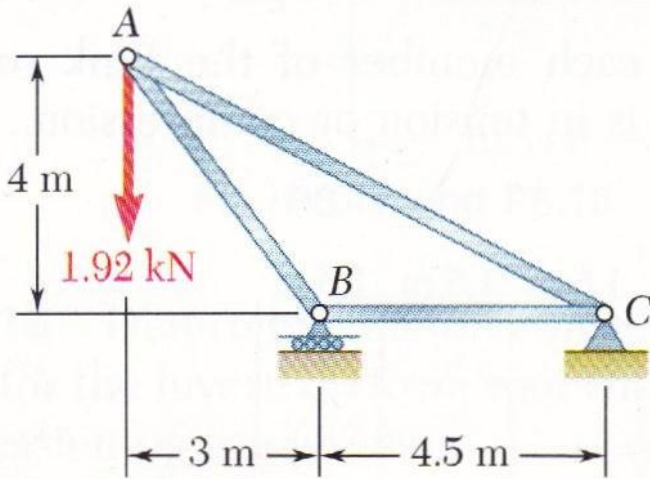


Fig. P6.1

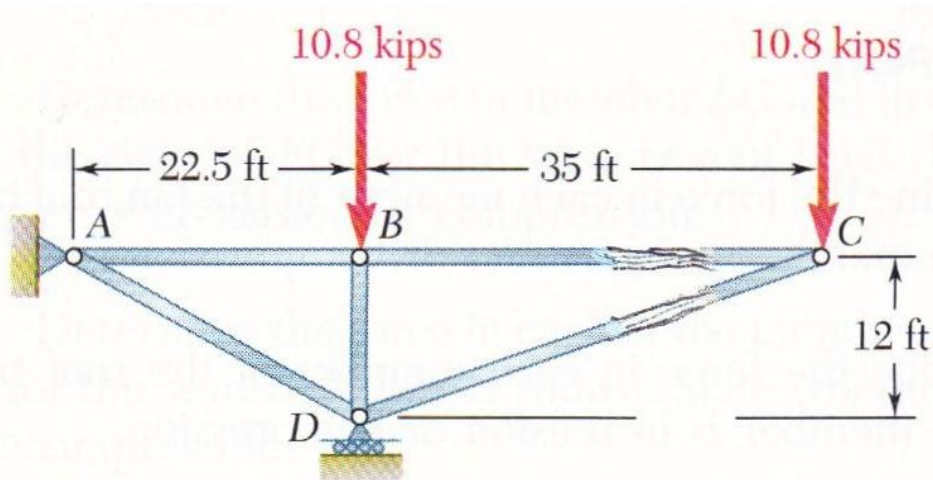


Fig. P6.4

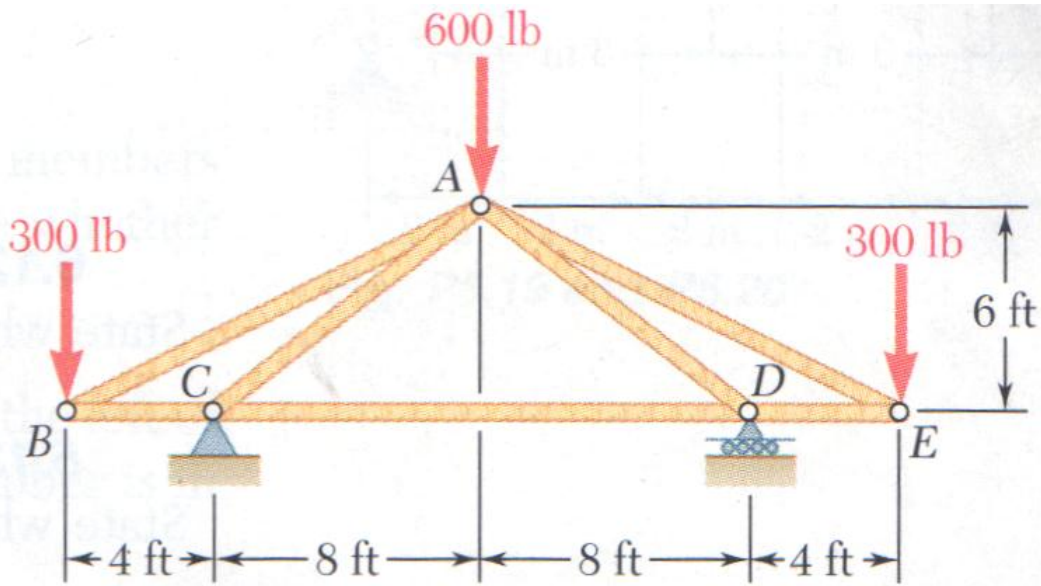


Fig. P6.5

6.10 Determine the force in each member of the Gambrel roof truss shown. State whether each member is in tension or compression.

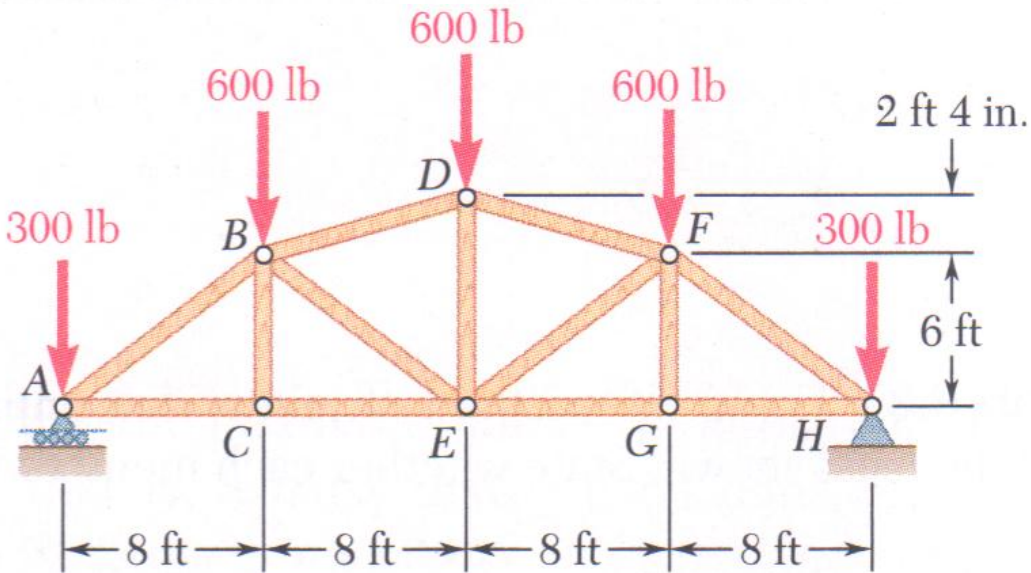


Fig. P6.10

6.15 Determine the force in each member of the Pratt bridge truss shown. State whether each member is in tension or compression.

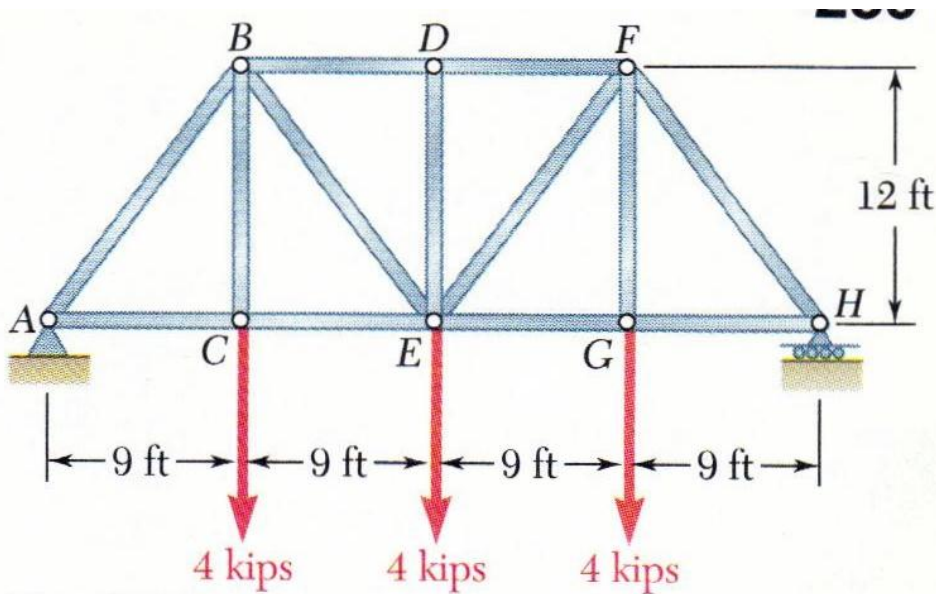


Fig. P6.15

6.23 The portion of truss shown represents the upper part of a power transmission line tower. For the given loading, determine the force in each of the members located above HJ . State whether each member is in tension or compression.

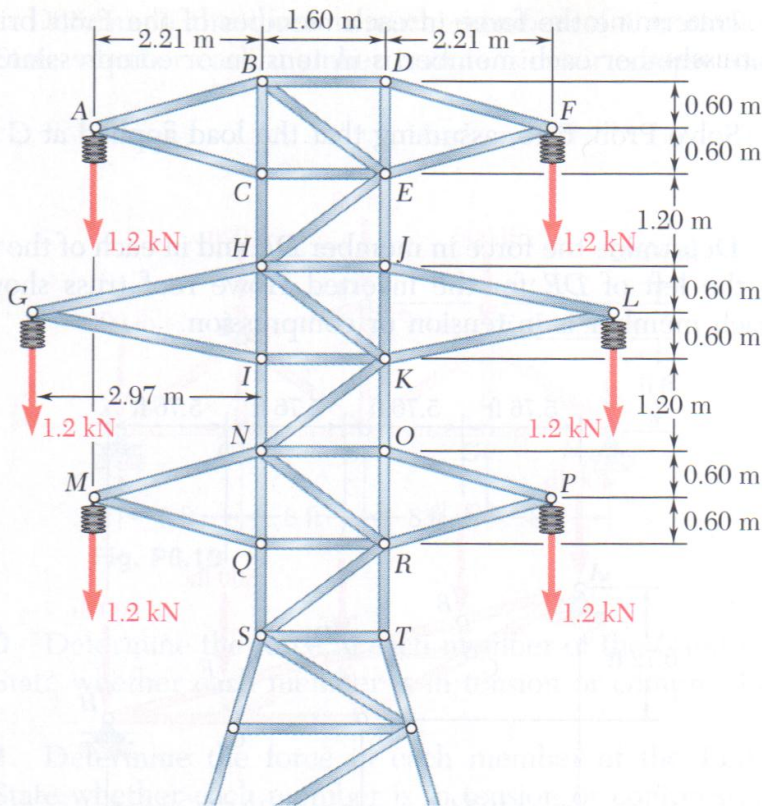


Fig. P6.23

6.43 A Mansard roof truss is loaded as shown. Determine the force in members DF , DG , and EG .

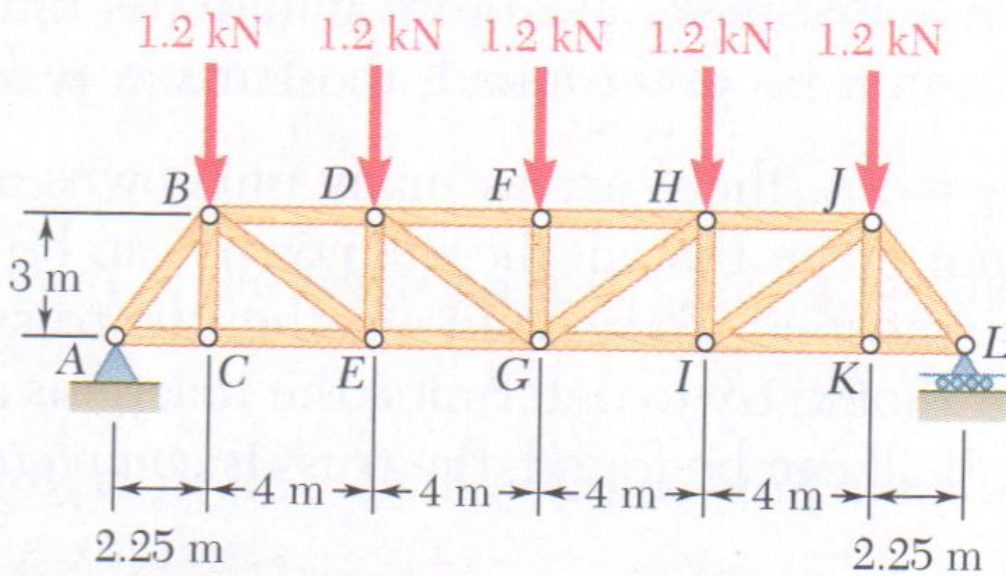


Fig. P6.43 and P6.44

6.47 A floor truss is loaded as shown. Determine the force in members CF , EF , and EG .

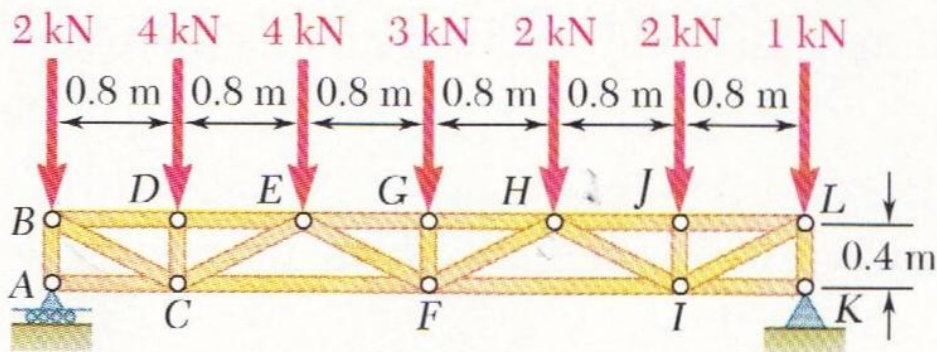
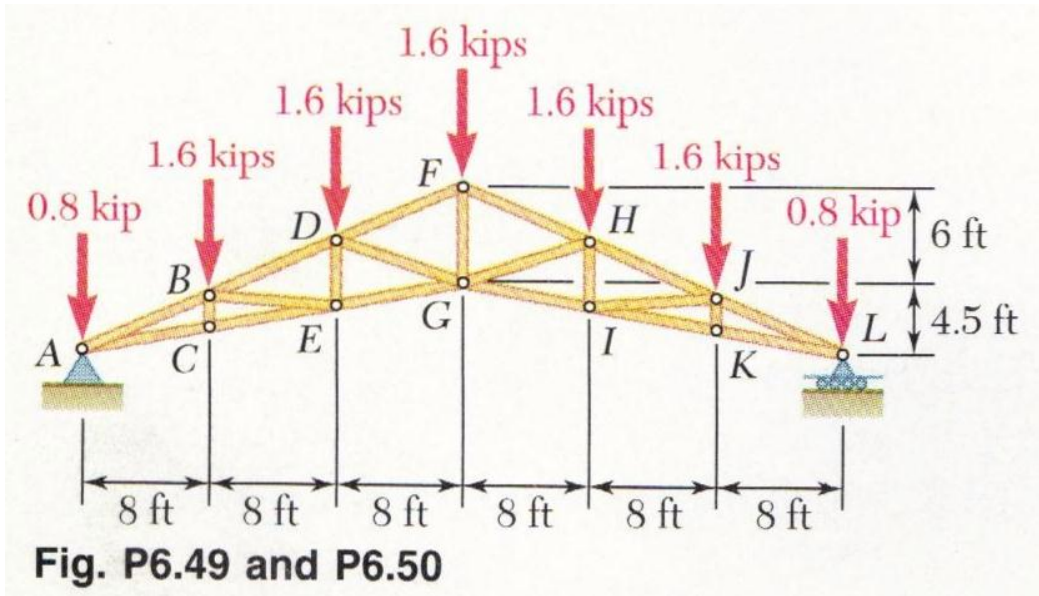
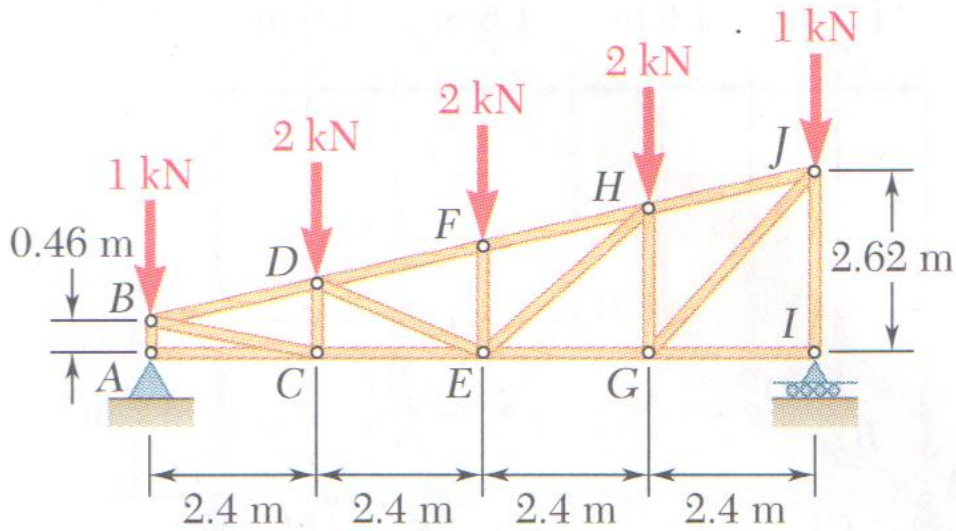


Fig. P6.47 and P6.48

6.49 A Howe scissors roof truss is loaded as shown. Determine the force in members DF , DG , and EG .



6.52 A pitched flat roof truss is loaded as shown. Determine the force in members EG , GH , and HJ .



6.56 A stadium roof truss is loaded as shown. Determine the force in members AE , EF , and FJ .

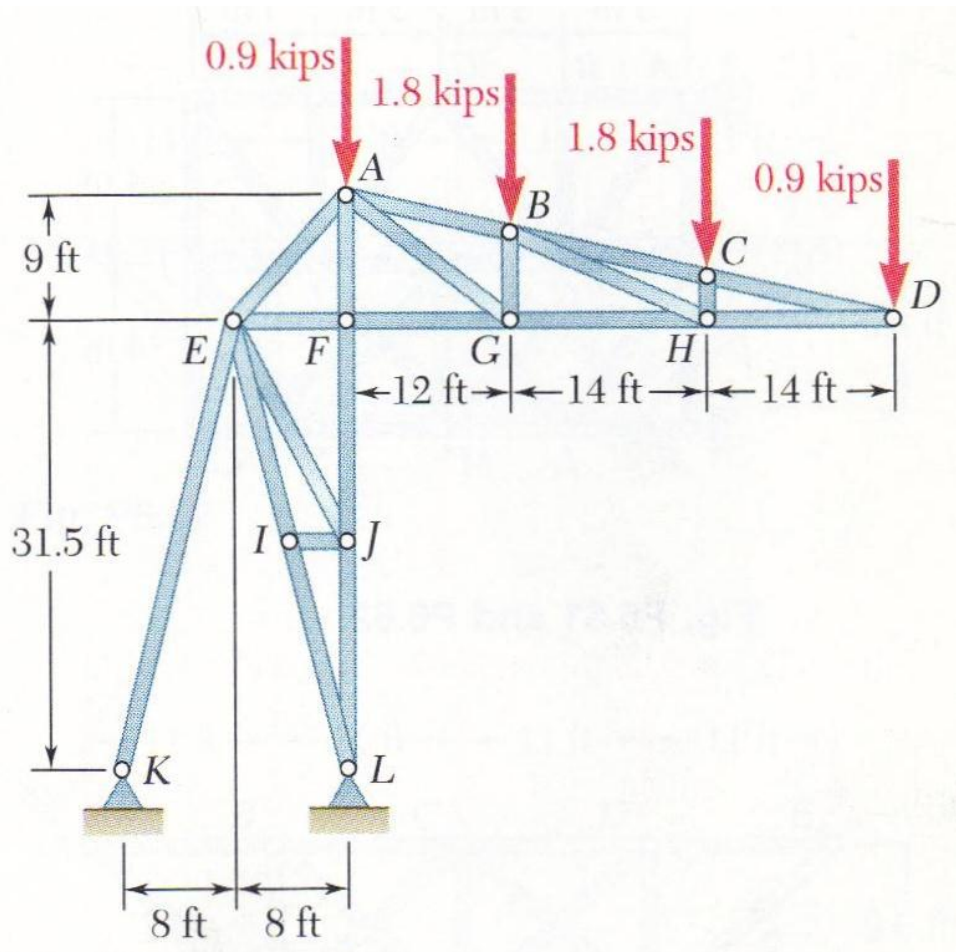


Fig. P6.55 and P6.56

