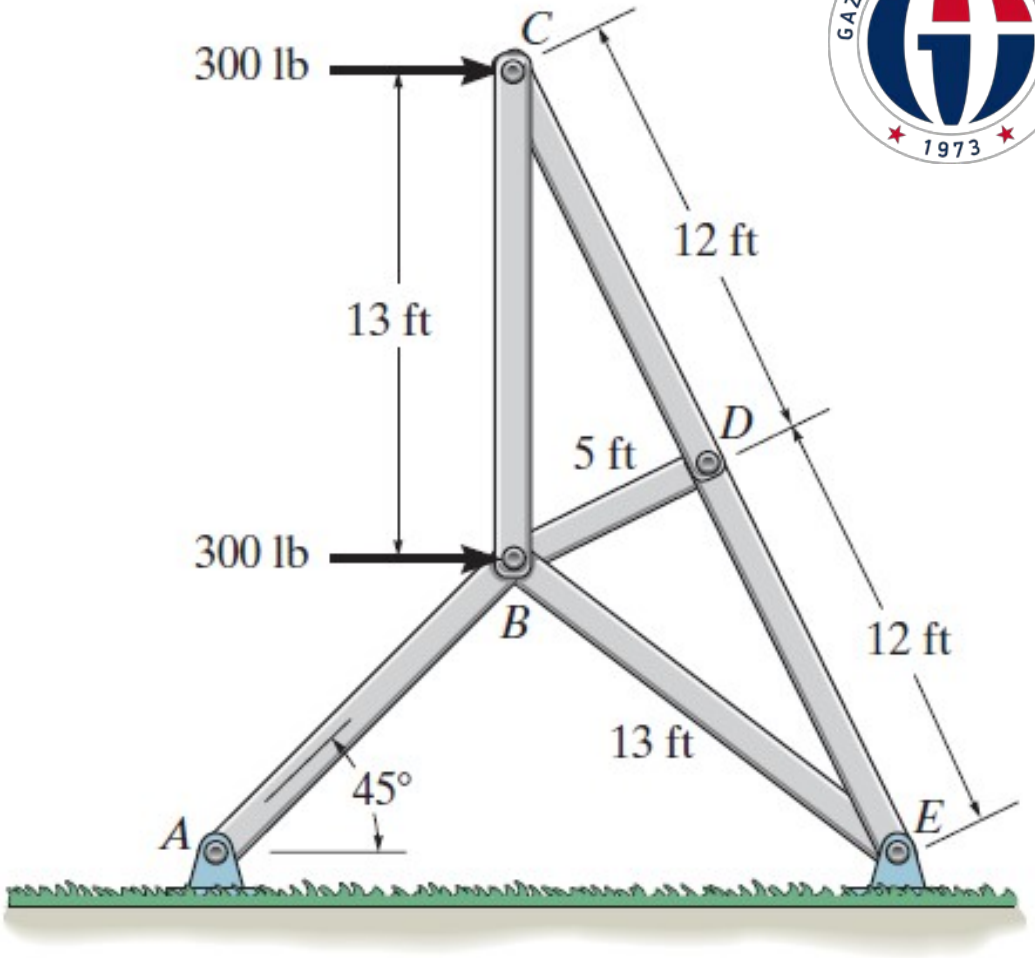
ME 201 STATICS

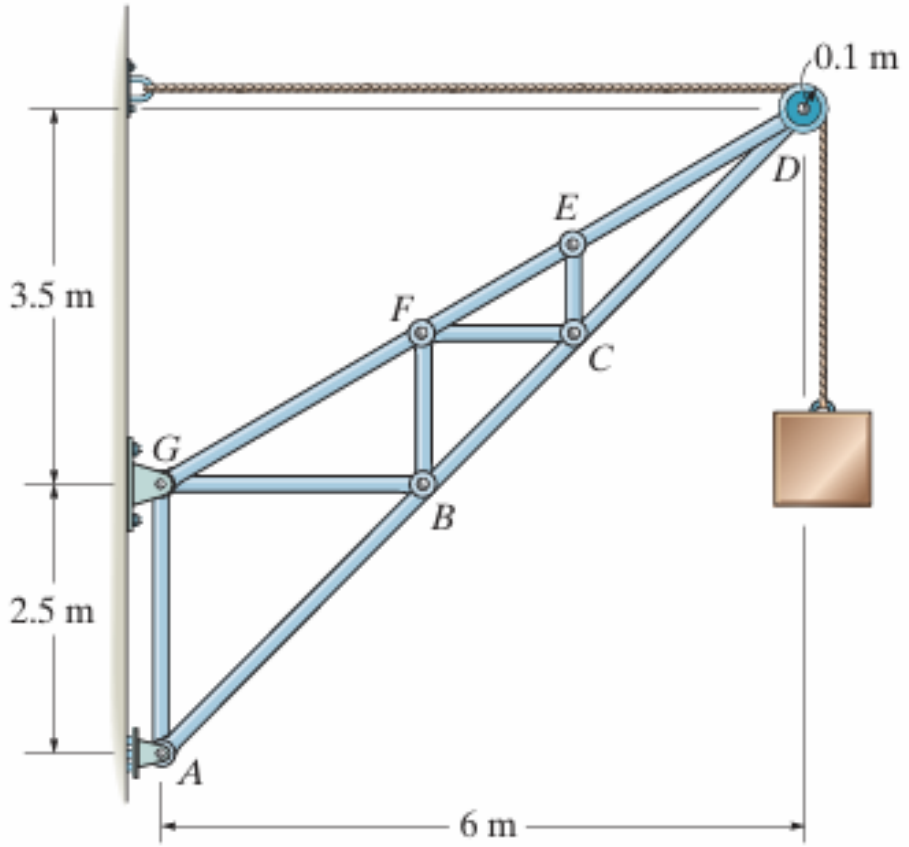
PROBLEM HOUR V

TRUSS STRUCTURES

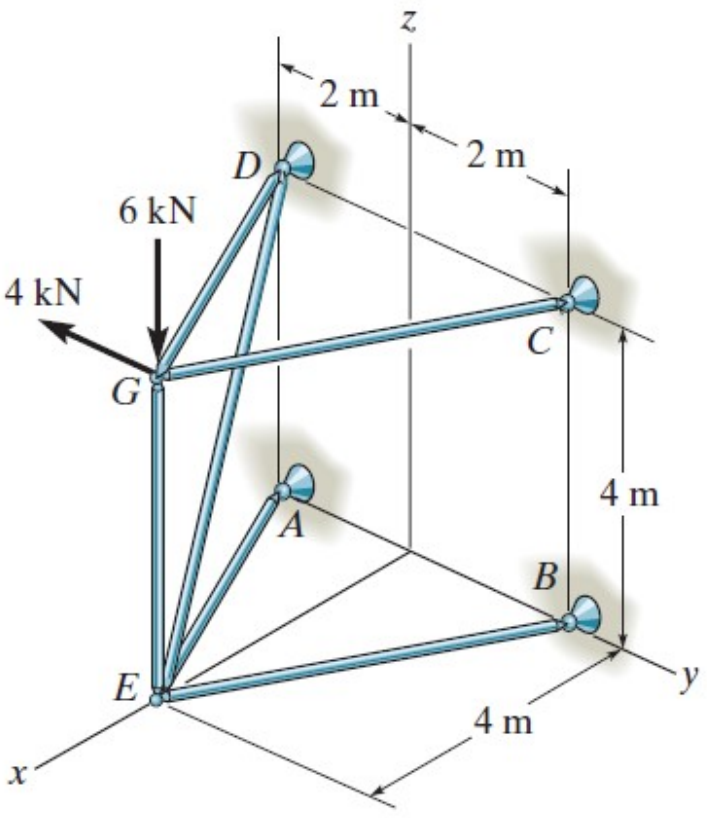
Q1) A sign is subjected to a wind loading that exerts horizontal forces of 300 lb on joints *B* and *C* of one of the side supporting trusses. Determine the force in each member of the truss and state if the members are in tension or compression.



Q2) Determine the force in each member of the truss and state if the members are in tension or compression. The load has a mass of 40 kg.



Q3) Determine the force in each member of the space truss and state if the members are in tension or compression. The truss is supported by ball-and-socket joints at *A*, *B*, *C*, and *D*.



Q4) Determine the tension in the cable and the horizontal and vertical components of reaction of the pin *A*. The pulley at *D* is frictionless and the cylinder weighs 80 lb.

