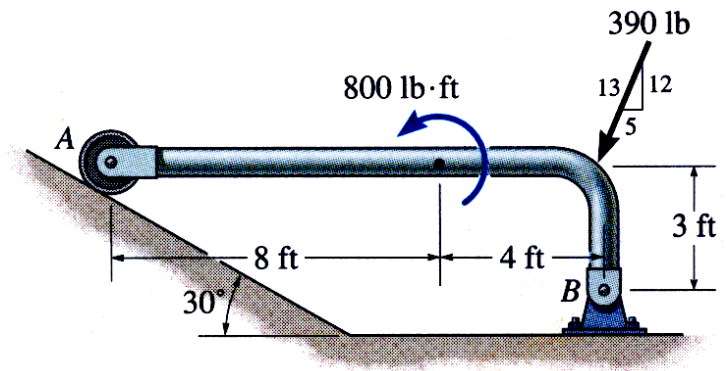


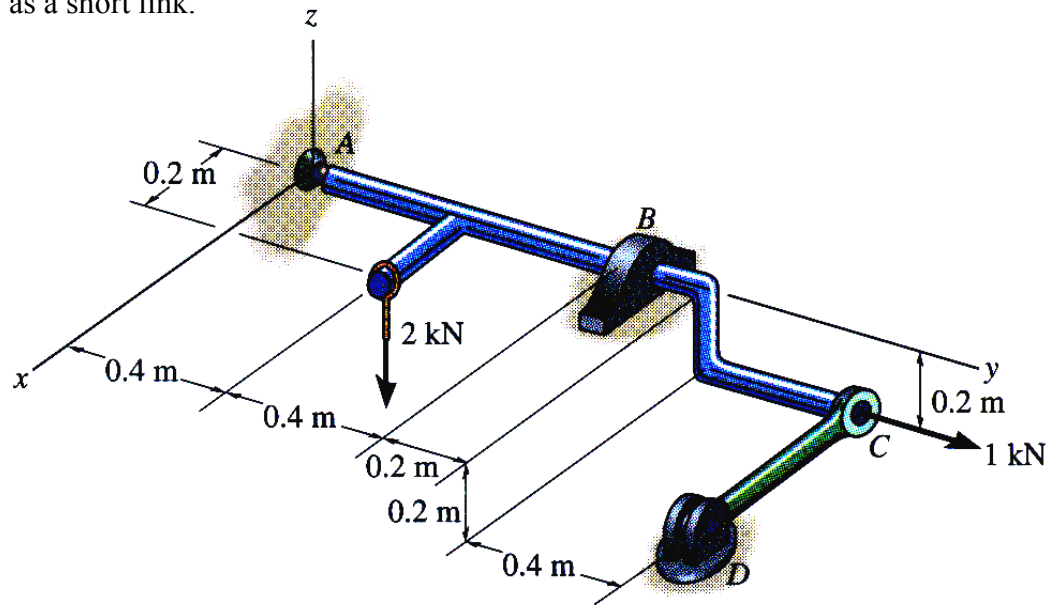
**BE50E Fall 2000 Exam 2**

**Name:** \_\_\_\_\_

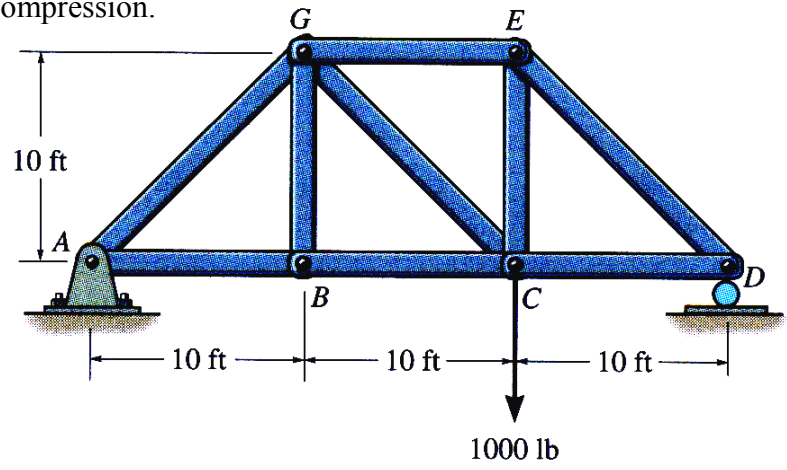
1. Determine the reactions at the roller *A* and pin *B*.



2. Determine the reactions at the ball-and-socket joint  $A$  and journal bearing  $B$ . Member  $CD$  acts as a short link.



3. Determine the force in members  $AG$ ,  $BG$ ,  $CG$ , and  $EG$  of the truss and state if the members are in tension or compression.



4. The wall crane supports a load of 700 lb. What is the force in the cable at the winch  $W$ ? Also, determine the reactions at the pins  $A$  and  $D$ .

