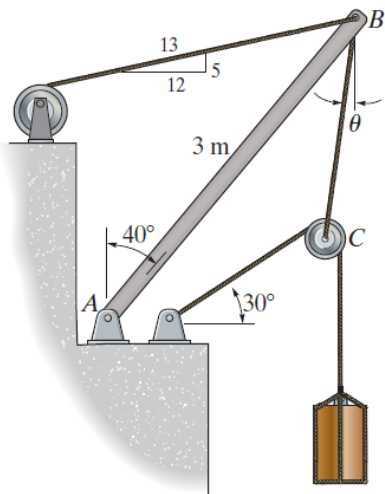


StarID or TechID (no names) \_\_\_\_\_

Show your work (you will not receive any credit if all you have is a final answer, right or wrong).

Do one of the two problems shown below (the second problem is on the back).

1. The crane below is in static equilibrium with the 3 kN container lifted as shown. Determine the force in the cable BC and its orientation  $\theta$ . Also determine the horizontal and vertical components of force at pin support A.



2. Using the method of sections, determine the force in members GF, CF, and CD of the truss and state whether the members are in tension or compression. (the dimensions of the truss are symmetric about its center)

