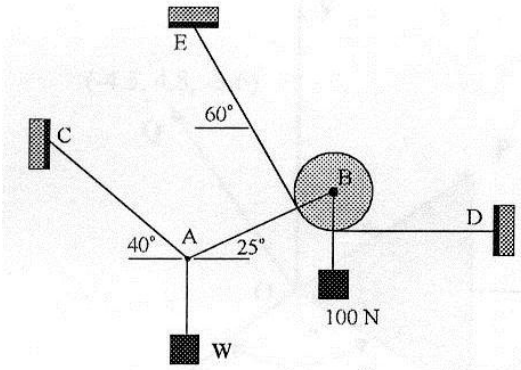
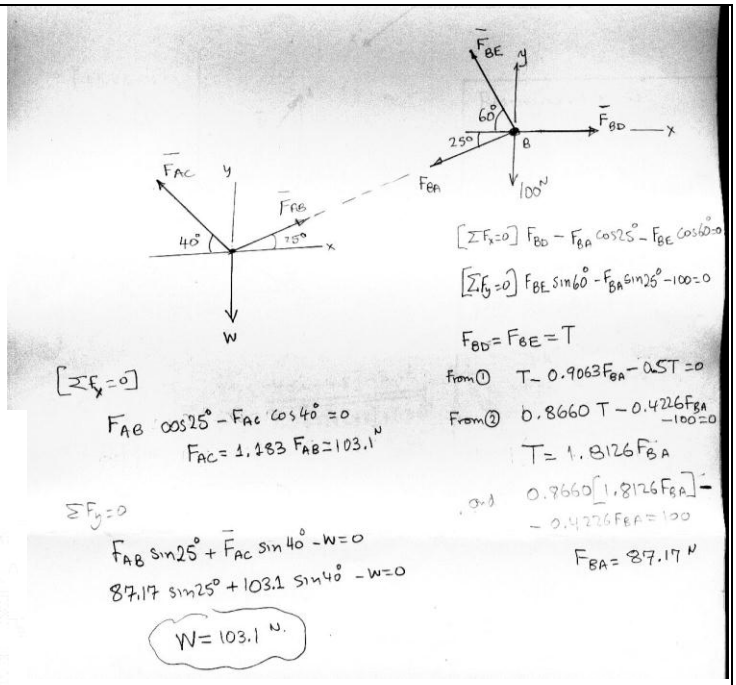
PLEASE INCLUDE THIS SHEET WITH YOUR SUBMISSION

A 100 N weight is attached to a pulley at *B*. The pulley can roll on the cable which is attached to supports at *E* and *D*. Two cables *AC* and *AB* tied at *A* support a weight, *W*.

The system is in equilibrium in the configuration shown. Determine the magnitude of the weight *W*.





2. The 460 N man is holding the 360N weight W in equilibrium, as shown.
(a) What is the tension in the rope?
(b) How much higher can he raise the weight?