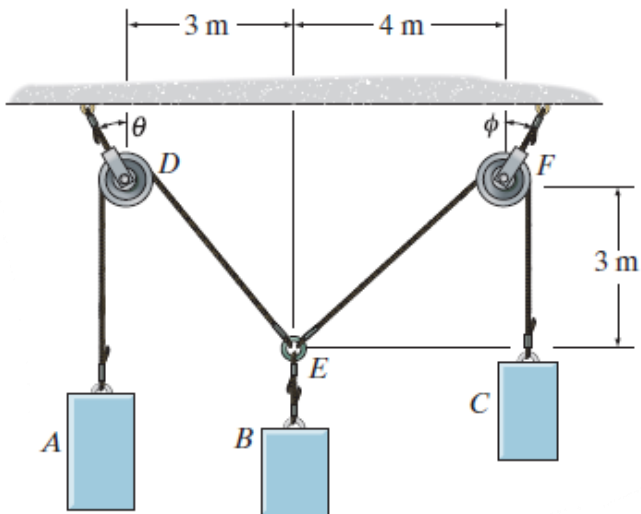CME 250 – Statics
Exam #3 (09/27/2023)

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. Block A has a mass of 20 kg. Determine the weight of block B and the weight of block C so that the system is in equilibrium as shown. Also determine the angle θ shown above pulley D.

2. What is the tension in each cable assuming the piece of equipment is in equilibrium as shown.

10 kN

A

3 m

D

C

1 m

B

2 m

1.25 m

1.25 m

z

x

y