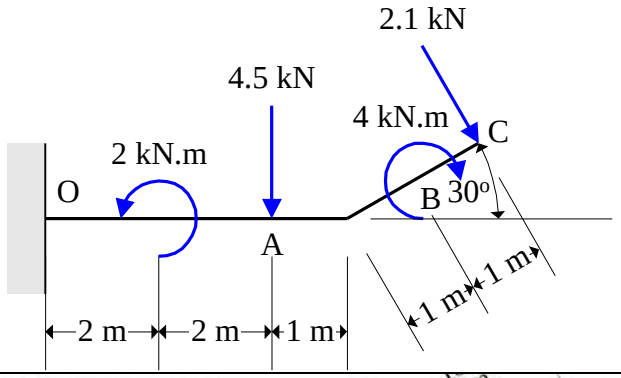
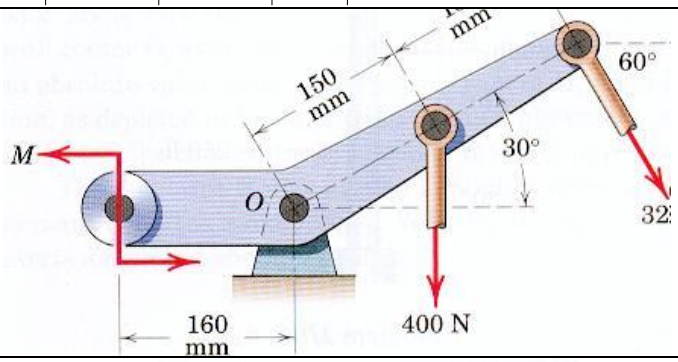
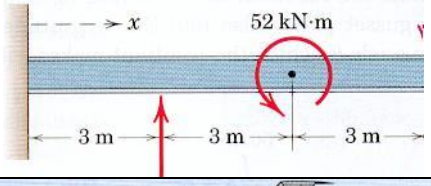
PLEASE INCLUDE THIS PAGE WITH YOUR SUBMISSION

NAME:_____Student #_____ GROUP:_____

ENG 1440 Assignment #5

1. Replace the given forces and couple with a single force and a couple acting at O. The force loads shown lie in a vertical fixed plane.	
2. If the resultant of the two forces and couple passes through O, determine M	
3. Determine and locate the resultant R of the two forces and one couple acting on the beam	
BONUS: A commercial airliner with four jet engines, each producing 90 kN of forward thrust, is in a steady. Level cruise when engine number 3 suddenly fails. Determine and locate the resultant of the three remaining engine thrust vectors. Treat this as a two dimensional problem.