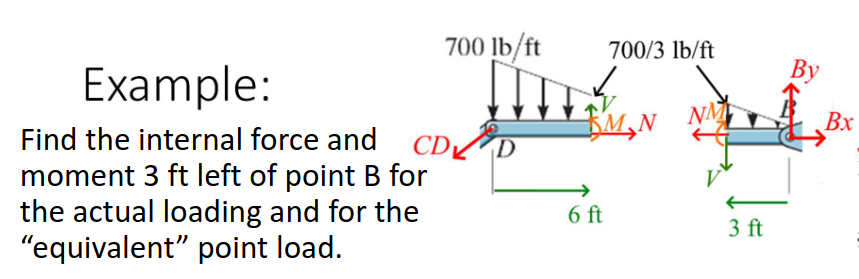
2P04 Lab 4

Talha Ahmad, 400517273

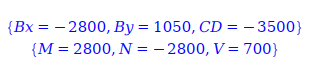
# Lecture 12

## Lecture Questions



We can start by first solving for this system as a whole without considering the internal forces. Then, we can switch and use one half of the right side where we can consider the internal forces and in doing so, we can solve for the internal forces. We can write out the following Maple code for this:

# Lecture 12 lecture question  
  
# Solve for outside values  
restart: p:=700\*(1-x/9):  
solve([  
-CD\*4/5+Bx,  
-CD\*3/5-int(p,x=0..9)+By,  
-int(x\*p,x=0..9)+9\*By]); assign(%):  
  
# Solve for internal values  
solve([  
-4/5\*CD+N,  
-3/5\*CD-int(p,x=0..6)+V,  
-int(x\*p,x=0..6)+6\*V+M]);



Therefore, we get that the shear force at the internal point is 700 N upwards, the normal force is 2800 N towards the right, and the moment is 2800 N\*m out of the page.

## Quiz and Reflection

