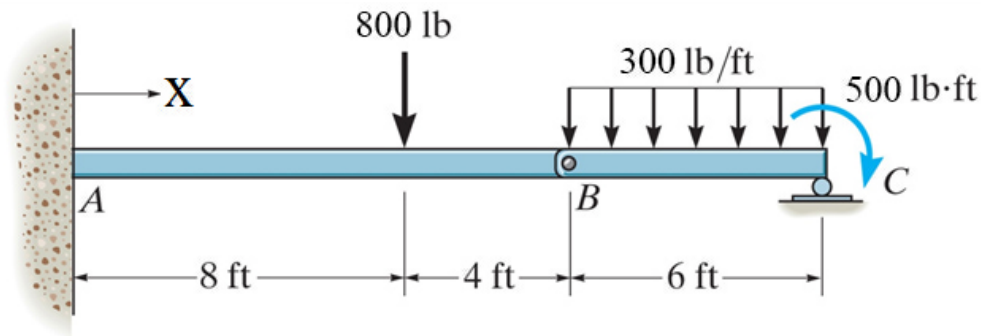


Name: _____

TAM 210/211 Written Assignment 10 (due on April 7th)

- The beam consists of two segments pin connected at B.
 - Obtain the shear force $V_1(x)$ and bending moment $M_1(x)$ for $0 < x < 8$ ft
 - Obtain the shear force $V_2(x)$ and bending moment $M_2(x)$ for $8 < x < 12$ ft
 - Obtain the shear force $V_3(x)$ and bending moment $M_3(x)$ for $12 < x < 18$ ft
 - Draw the shear and bending moment diagrams

[Remember to draw well-labeled free body diagrams.]



- Two blocks A and B have a weight of 10 lbs and 6 lbs, respectively. They are resting on the incline for which the coefficients of static friction are $\mu_A = 0.15$ and $\mu_B = 0.25$. The spring has a stiffness of $k = 2$ lbs/ft and is originally unstretched.
 - Determine the angle θ which will cause motion of one of the blocks.
 - What are the friction forces under each of the blocks when this occurs?
 - Determine the angle θ which will cause motion of both the blocks.
 - What are the friction forces under each of the blocks when this occurs?

