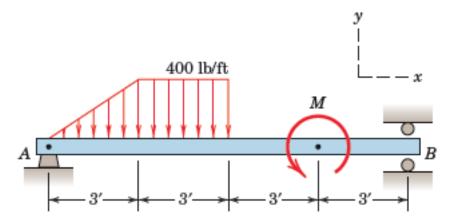
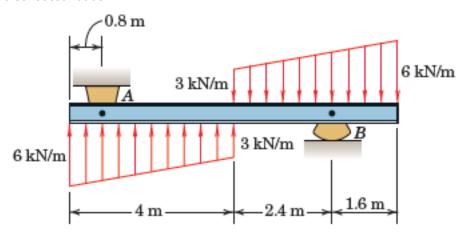
## 1. Chapter 5, Practice Problem 5/16

The beam is subjected to the distributed load and the couple shown. If M is slowly increased starting from zero, at what value  $M_0$  will contact at B change from the lower surface to the upper surface?



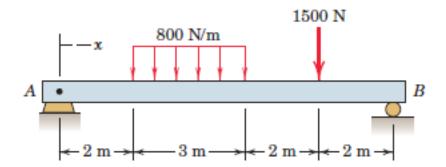
## 2. Chapter 5, Practice Problem 5/17

Calculate the support reactions at  $\boldsymbol{A}$  and  $\boldsymbol{B}$  for the beam subjected to the two linearly distributed loads.



## 3. Chapter 5, Problem 5/149

What are the values of the shear force and bending moment at x=6 m? Extra: Determine the maximum bending moment  $M_{\text{max}}$ .



## 4. Chapter 5, Supplemental Problem 5/088

Determine the shear (V) and moment (M) at a section 3 m to the left of the support at A.

Note: Although the structure is indeterminate, no forces act horizontally (not required for equilibrium).

