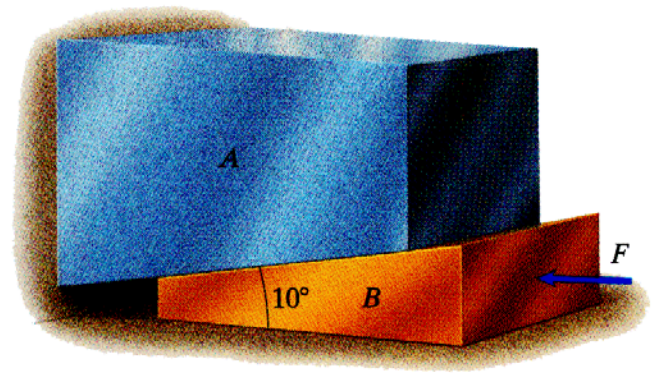
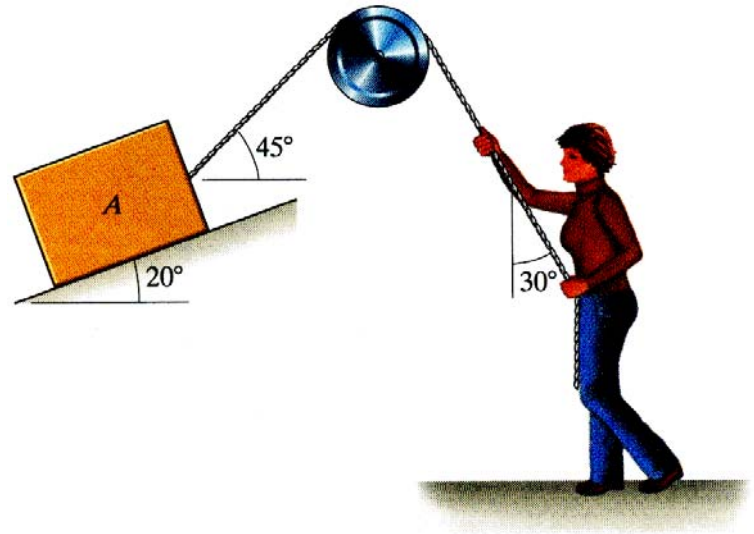


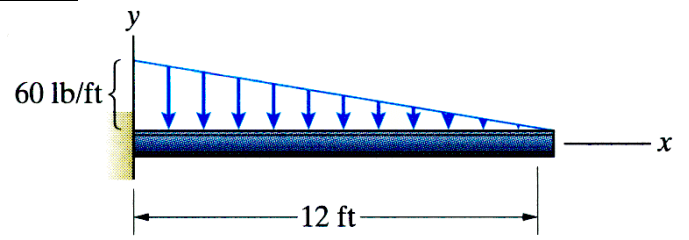
1. The weights of the blocks are $W_A = 100$ lb and $W_B = 25$ lb. Between all of the contacting surfaces, $\mu_s = 0.32$. What force F is necessary to move B to the left?



2. The coefficient of static friction between the 50-lb box and the inclined surface is 0.10. The coefficient of static friction between the rope and the fixed cylinder is 0.05. Determine the minimum force the woman must exert on the rope to keep the box from sliding down the inclined surface.



3. Determine the shear force and bending moment equations.



4. Draw the shear force and bending moment diagrams, and label all peak values. The ground reaction at the pin connection is 23.33 kN (upward) and at the roller connection is 18.67 kN (upward).

