

# Announcements

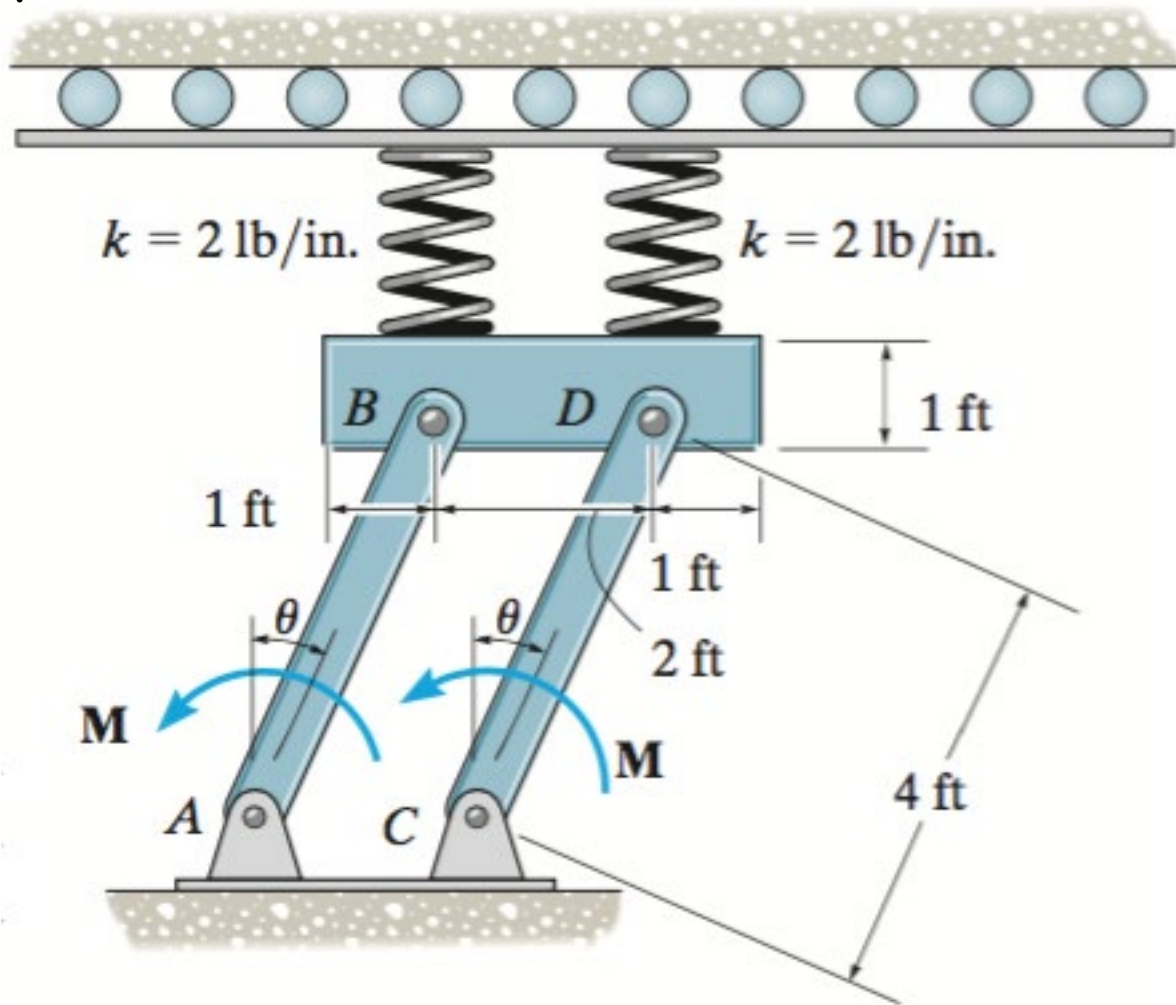
- Last day of class: Monday, Dec. 10
- No discussion sections next week
- Last day of office hours and Piazza help: Wednesday, Dec. 12
- CBTF (last) Quiz 6 starts Thursday, Dec. 13

## ☐ Upcoming deadlines:

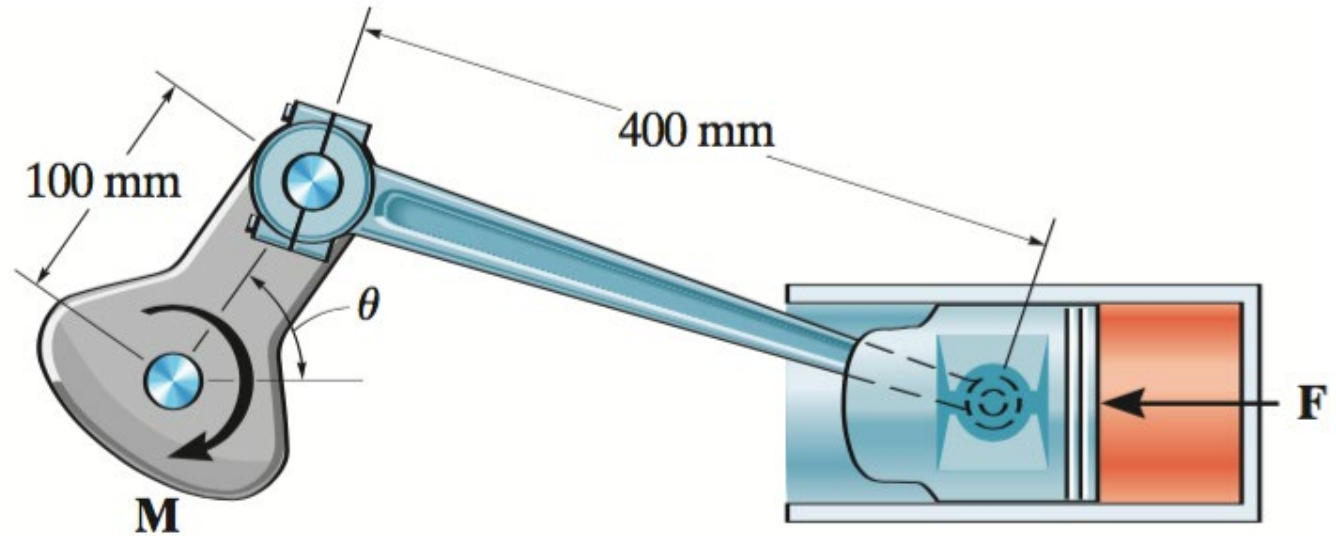
- Friday (12/7) – Today!
  - Written assignment 9
- Tuesday (12/11)
  - Last PL HW



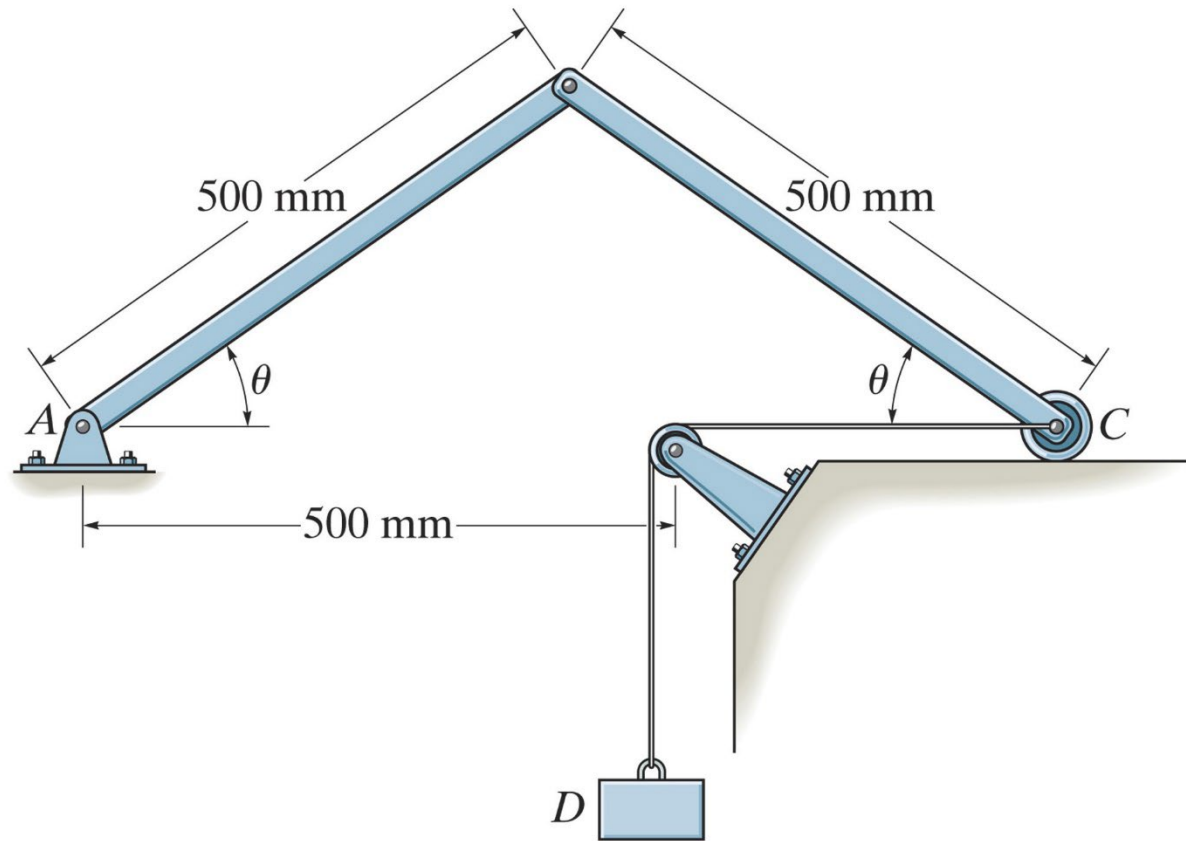
When  $\theta = 20^\circ$ , the 50-lb uniform block compresses the two vertical springs 4 in. If the uniform links  $AB$  and  $CD$  each weigh 10 lb, determine the magnitude of the applied couple moments  $\mathbf{M}$  needed to maintain equilibrium when  $\theta = 20^\circ$ .



The crankshaft is subjected to a torque of  $M = 50 \text{ N m}$ . Determine the horizontal compressive force  $F$  applied to the piston for equilibrium when  $\theta = 60^\circ$ .



Determine the angle of equilibrium,  $\theta$ , given that block  $D$  has a mass of 7 kg and the links each have a mass of 3 kg.



Determine the weight of block  $G$  required to balance the differential lever when the 20-lb load is placed on the pan at  $F$ .

