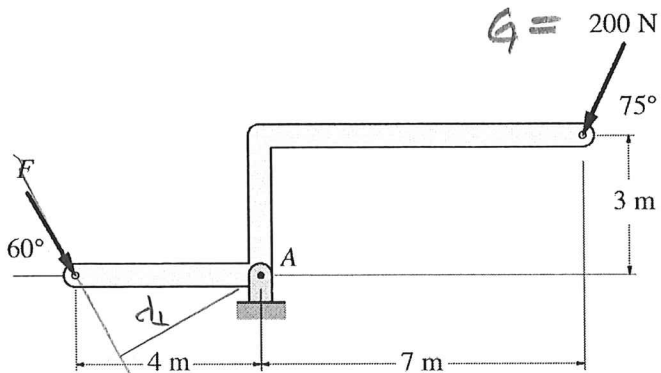


Example 4 Moment Balance

Determine the magnitude of F required to make the frame balance about point A.



$$\underline{\underline{\Sigma M_A = 0}}$$

$$F d_L + G_x(3) - G_y(7) = 0$$

$$F(4 \sin 60) = -G \cos 75(3) + G \sin 75(7)$$

$$F(3.46) = G(-1.7765 + 6.76)$$

$$F = 1.72 G$$

$$= \underline{\underline{346 \text{ N}}}$$