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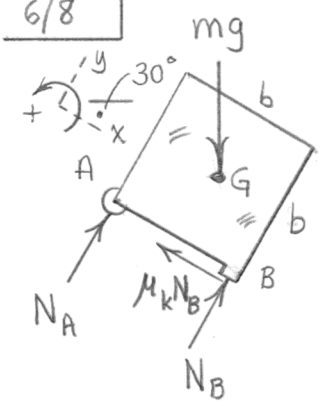

$\Sigma F_x = 0: \quad -\mu_k N_B + mg \sin 30^\circ = 0$

$\Sigma F_y = 0: \quad N_A + N_B - mg \cos 30^\circ = 0$

$\Sigma M_A = 0: \quad N_B(b) - mg\left(\frac{b}{2}\cos 30^\circ + \frac{b}{2}\sin 30^\circ\right) = 0$

Solving:

$$\begin{cases} N_A = 0.1830\,mg \\ N_B = 0.683\,mg \\ \mu_k = 0.732 \end{cases}$$

Reversing the roller and foot yields $\mu_k = 2.73$, an unlikelihood for simple contact.