

$$f_1 = \mu_k N, \quad f_2 = \mu_k n$$

$$M \Rightarrow \begin{cases} \sum F_x = 2T - f_1 - n & \Rightarrow 2T - \mu_k N - n = Ma_1 \\ \sum F_y = N - Mg - T - f_2 & \Rightarrow N - Mg - T - \mu_k n = 0 \end{cases}$$

$$m \Rightarrow \begin{cases} \sum F_x = n & \Rightarrow n = ma_{2x} \\ \sum F_y = T + f_2 - mg & \Rightarrow T + \mu_k n - mg = ma_{2y} \end{cases}$$