TAM 212

N pages of cheat sheets is just right.

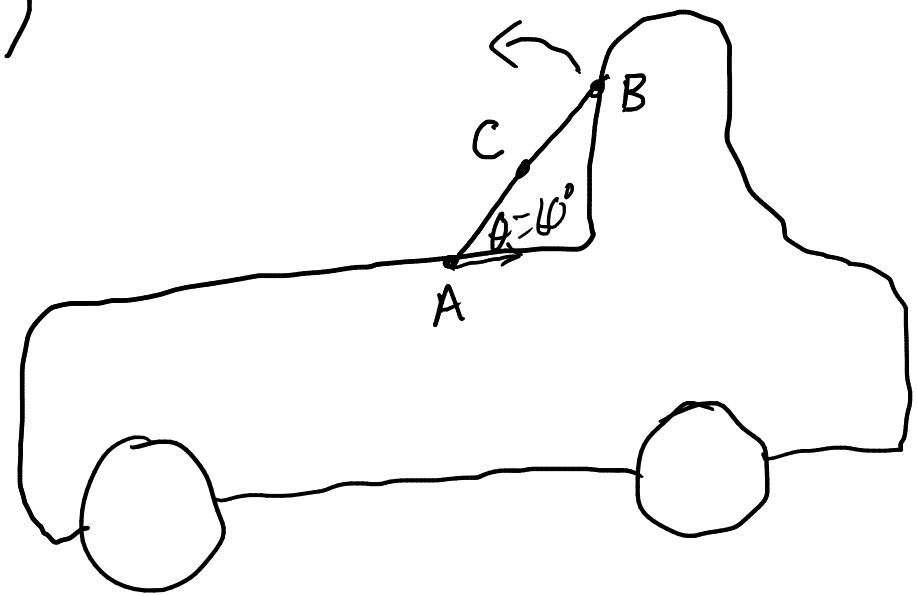
A) N = 1 6%

B) N = 2 9%

C) N = 3 13%

D) N = 4 64%

Ex)

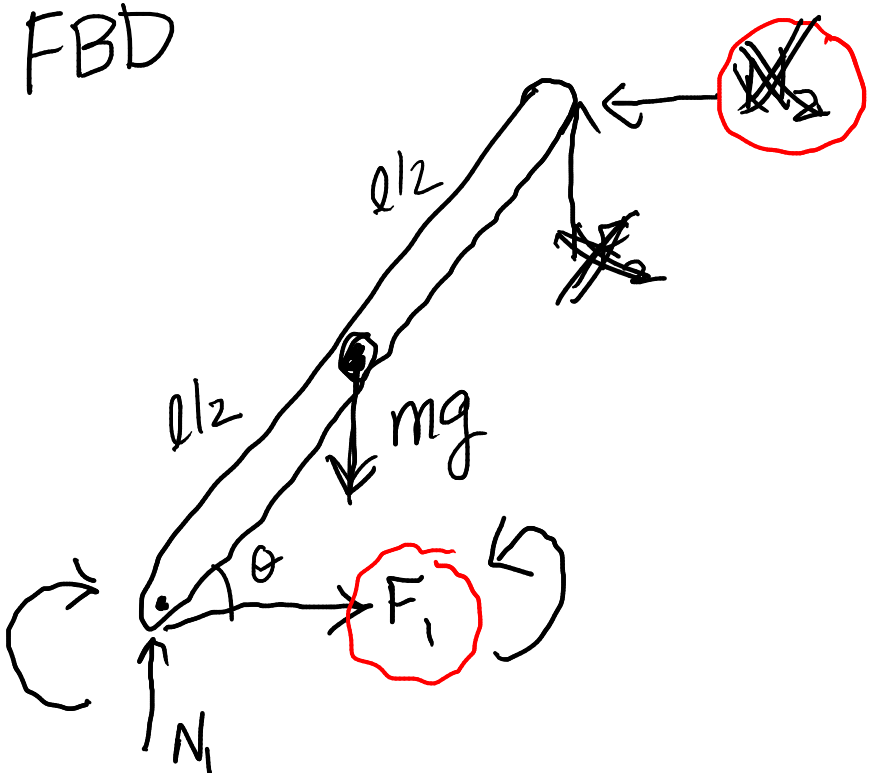


<u>case 1</u> Bar loses contact at point B.

$$F_2 \to 0,\ N_2 \to 0$$

At the onset of losing contact,

FBD

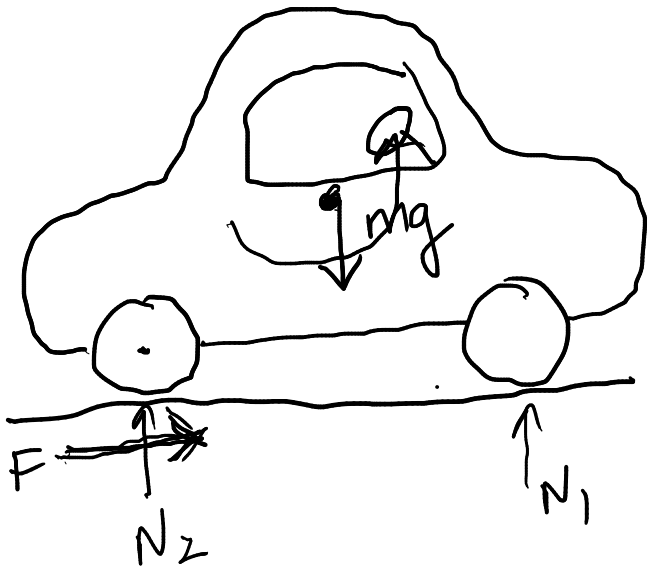


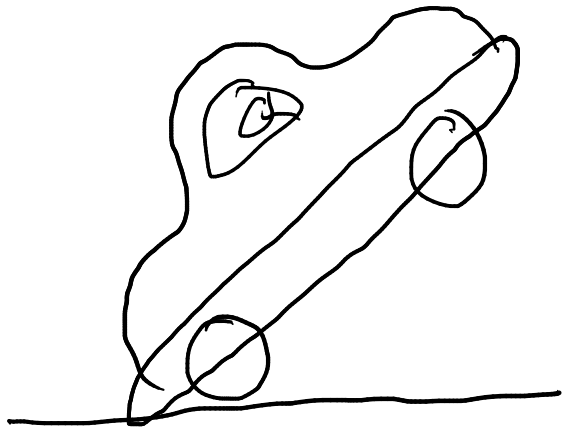
$$\begin{cases} ① \ \Sigma F_x = ma_{cx} \\ \quad\ F_1 = ma_{cx} \\ ② \ \Sigma F_y = ma_{cy} = 0 \\ \quad\ N_1 = mg \\ ③ \ \Sigma M_c = 0 \end{cases}$$

$$F_1\left(\frac{l}{2}\sin\theta\right) - N_1\left(\frac{l}{2}\cos\theta\right) = 0$$

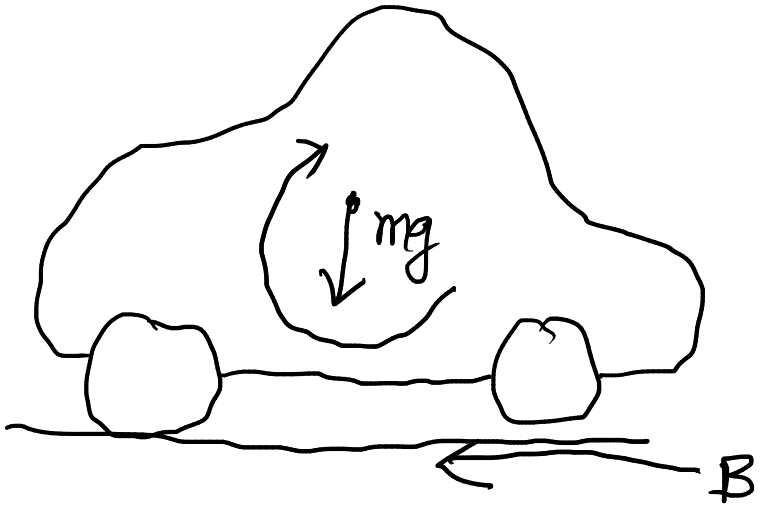
$$F_1 = N_1/\sqrt{3} = 0.577 N_1$$

① wheelie - accelerating hard





② apply hard breaking force to front wheel



③ slipping at rear wheel!