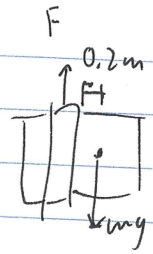
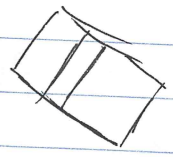
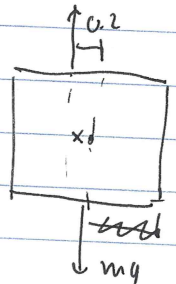
(4)

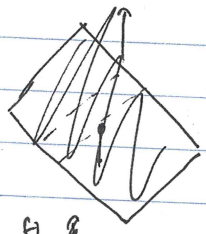


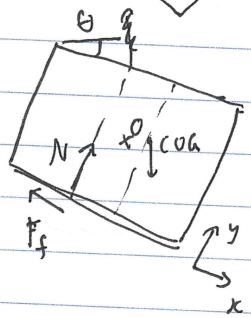




μ_s

Moment about 0.1





ΣF_x : $N\sin\theta - F_f\cos\theta = ma_x$

ΣF_y : $N\cos\theta - mg + F_f\sin\theta = ma_y$

ΣM_o :

×

ΣF_x : $mg\sin\theta - \mu_s N = ma_x$

ΣF_y : $N - mg\cos\theta = ma_y = 0$ $\quad a_y = 0$

$N = mg\cos\theta$

$a_x > 0$ slipping

$mg\sin\theta - \mu_s mg\cos\theta \geq 0$

$\sin\theta > \mu_s\cos\theta$ $\quad \tan\theta > \mu_s$

$\operatorname{atan}\mu_s < \theta$