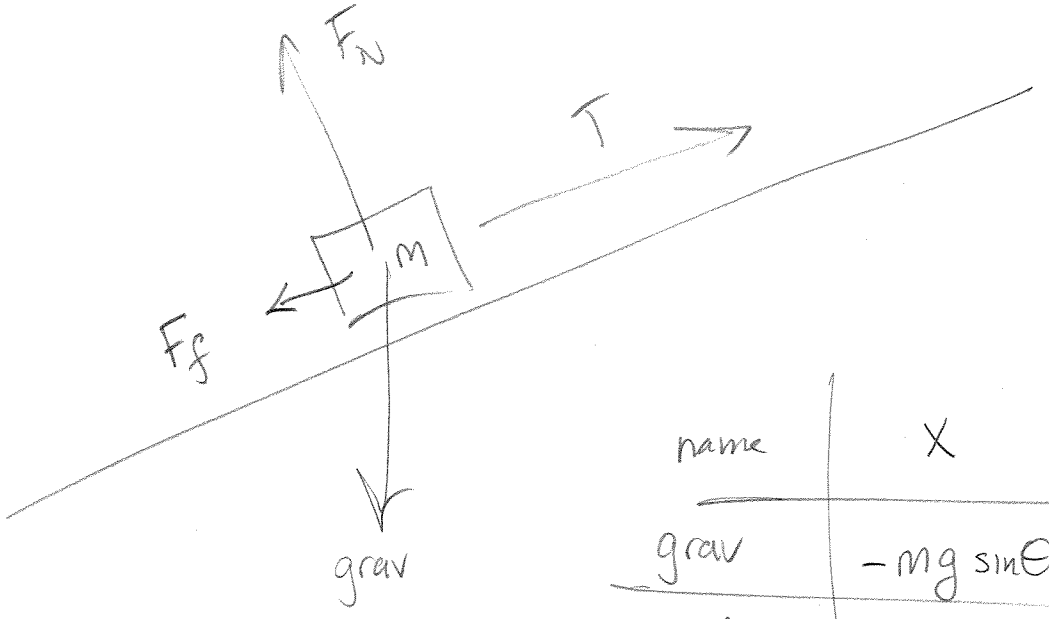
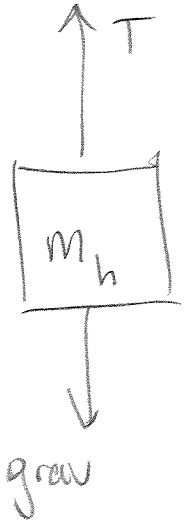


name	X	y
grav	$-mg\sin\theta$	$-mg\cos\theta$
rope	$+T$	0
normal	0	$+F_N$
friction	$-F_f$	0
tot	$+ma_x$	0



$$F_N = mg\cos\theta$$

$$F_f = \mu_K F_N = \mu_K mg\cos\theta$$

name	x	y
grav	0	$-m_h g$
rope	0	$+T$
tot	0	$-m_h a_y$

(1) $T - m_h g = -m_h a$

(2) $T - mg\sin\theta - \mu_k mg\cos\theta = +ma$