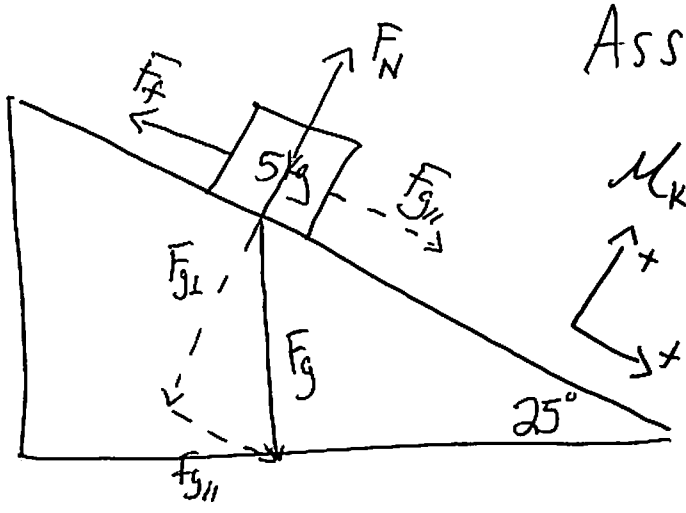

Assume moves

$\mu_k = .1$

a) $F_{net_y} = ma_y$

$F_N - F_{g\perp} = 0N$

$F_N = F_{g\perp}$

$F_N = F_g \cos\theta$

$F_g = mg$

$F_g = (5kg)(9.8 m/s^2)$

$F_g = 49N$

$F_N = 49\cos 25°$

$\boxed{F_N = 44.4N}$

b) $F_f = \mu_k F_N$

$F_f = (.1)(44.4N)$

$\boxed{F_f = 4.44N}$

Sum of the forces in the (x)

c) $F_{net_x} = \Sigma F_x$

$F_{net_x} = F_{g\parallel} - F_f$

$F_{g\parallel} = F_g \sin\theta$

$F_{g\parallel} = 49\sin 25$

$F_{g\parallel} = 20.7N$

$F_{net_x} = 20.7N - 4.44N$

$\boxed{F_{net_x} = 16.26N}$

d) $F_{net_x} = ma_x$

$16.26N = (5kg)(a_x)$

$\boxed{a_x = 3.25 m/s^2}$