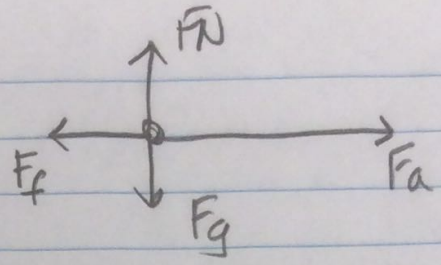
5. $W = F_g = 400N$
$\mu = .5$
$a = 1.3\ m/s^2$



a. $F_f = \mu F_N$

$F_f = .5(400)$

$F_f = 200N$

b. $F_{net} = ma$

$F_{net} = 41(1.3)$

$F_{net} = 53N$

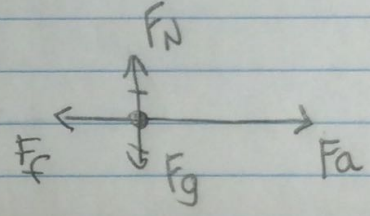
$F_g = mg$
$400 = m\ 9.8$
$41kg = m$

c. $F_{net} = F_f + F_a$

$53 = -200 + F_a$
$+200 \quad +200$

$253N = F_a$

6. $F_g = 600N$
$F_a = 400N$
$\mu = ?$
$a = 1.3\ m/s^2$



$F_g = mg$
$600 = m\ 9.8$
$61.2 = m$

$F_{net} = ma$
$= 61(1.3)$
$= 79N$

$F_{net} = F_f + F_a$
$79 = F_f + 400$
$-400 \quad -400$

$321 = F_f$
$= \mu F_N$

$321 = \mu\ 600$

$.53 = \mu$