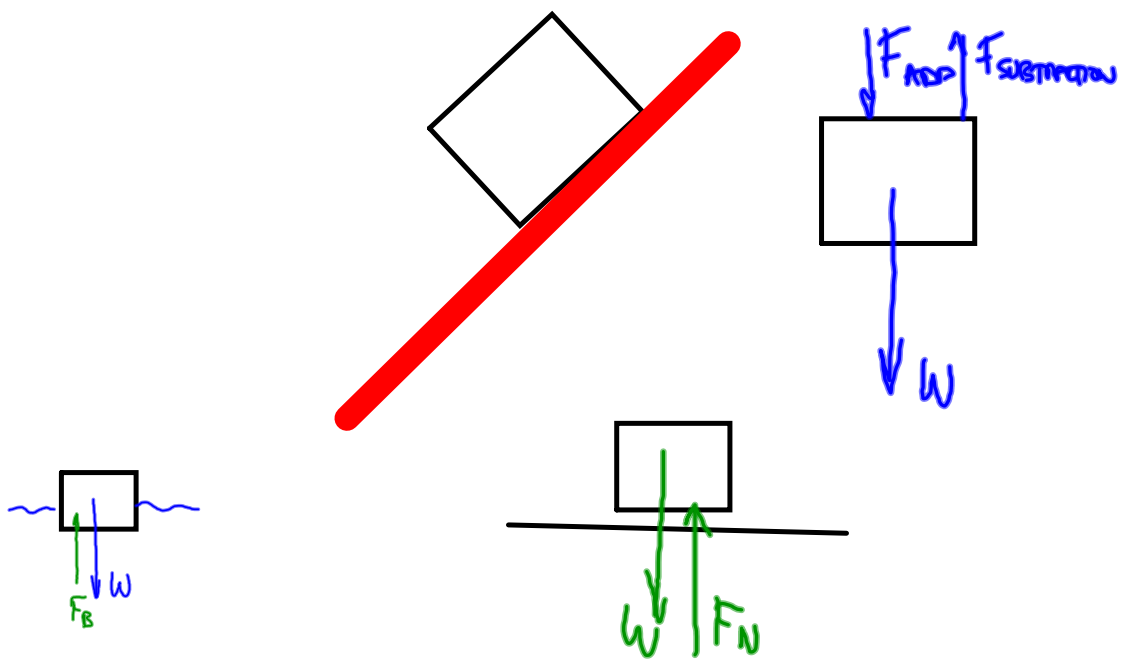
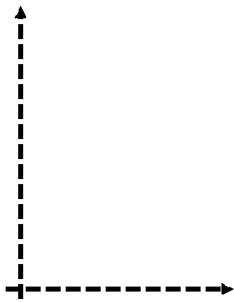


SOL - NAME TWO EXAMPLES WHEN $F_N \neq W$



MOUSE TRAP PALOZ HANDOUT ~



$v = \text{constant}$

$a = 0$

$F_{\text{net}} = 0$

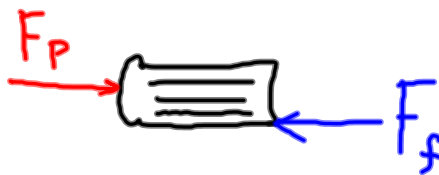
~~$F_p > F_f$~~

~~$\sum F'_s = ma = 0$~~

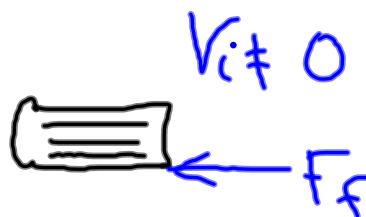
$F_p - F_f = 0$

$F_p = F_f$

$F_N = W$



$\sum F'_s = \text{NET FORCE}$

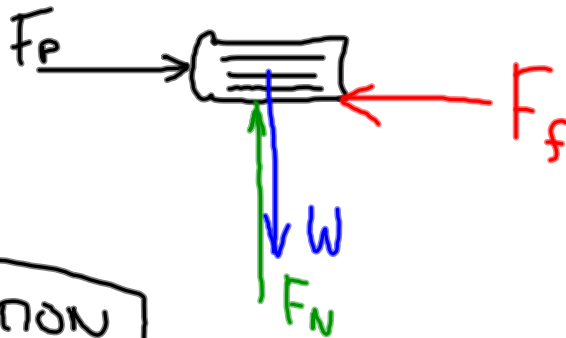


$$V_y = 0$$
$$a_y = 0$$

$$V_x = \frac{1}{2} \text{ m/s} = 0.5 \text{ m/s} \rightarrow \text{CONSTANT VELOCITY}$$
$$a_x = 0$$



FBD



X DIRECTION

THE NET FORCE $\Rightarrow \sum F'_s = ma$

$$F_p - F_f = 0$$

$$F_p = F_f$$

$$V_i = 3 \text{ m/s}$$
$$V_{\text{max}} = V_i$$
$$V_f = 0$$



$a \neq 0$
DECELERATING