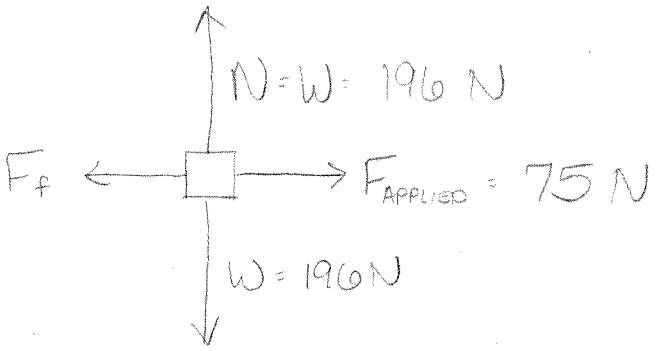
P #35

$m = 20\ kg$
$W = 196\ N$

$F_{applied} = 75\ N$

$\nu_s = ?$
$\nu_k = ?$



When the crate is set in motion... $F_f = F_A = 75N$

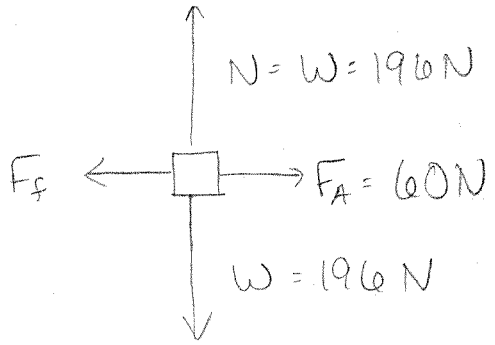
$F_f = 75\ N$
$N = 196\ N$

$F_f = \nu_s \cdot N$

$(75\ N) = \nu_s \cdot (196N)$

$$\boxed{\nu_s = .38}$$

As the crate is moving... $F_f = F_A = 60\ N$



$F_f = 60N$
$N = 196\ N$

$F_f = \nu_K \cdot N$

$60\ N = \nu_K \cdot (196N)$

$$\boxed{\nu_K = .31}$$