	X	Y
	$F_T\cos 60$	$-F_g$
F_{T2} 60	$-F_T\cos 60$	$F_T\sin 60$
	$F_T(\cos 0)$	$F_T\sin 60$
$\Sigma F = ma$	0	0

$F_g = 3041.1$

$F_T\sin 60 + F_T\sin 60 - F_g = 0$

$2F_T\sin 60 - 3041.1 = 0$

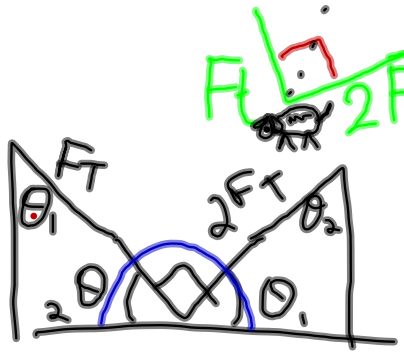
$+3041.1 \quad +3041.1$

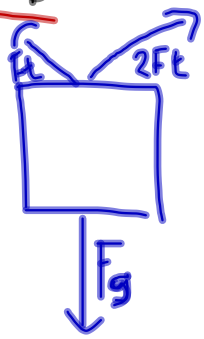
$\frac{2F_T\sin 60}{2} = \frac{3041.1}{2}$

$F_T = 1520.6$

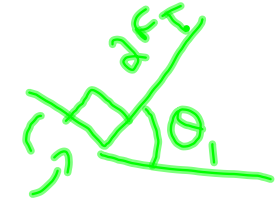
$\sin 60$

155 kg





x	y
$2F_t\cos\theta_1$	$-F_g$
$-F_t\sin\theta_1$	$2F_t\sin\theta_1$
	$F_t\cos\theta_1$
0	0



$90-\theta_1$

$\cos(90-\theta_1) = \sin\theta_1$

$\tan = \frac{\sin}{\cos}$

$2F_t\cos\theta_1 - F_t\sin\theta_1 = 0$

$\frac{2F_t\cos\theta_1}{\cos\theta_1} = \frac{F_t\sin\theta_1}{\cos\theta_1}$

$2F_t\sin\theta_1 + F_t\cos\theta_1 - F_g = 0$

$\frac{2F_t}{F_t} = \frac{F_t\tan\theta_1}{F_t}$

$2 = \tan\theta_1$ $\tan^{-1}(2)$

$\theta_1 = 63.4$

$2F_t\sin(63.4) + F_t\cos(63.4) - (9.81)(155)$

$2F_t\sin(63.4) + F_t\cos(63.4) - 1520.6$

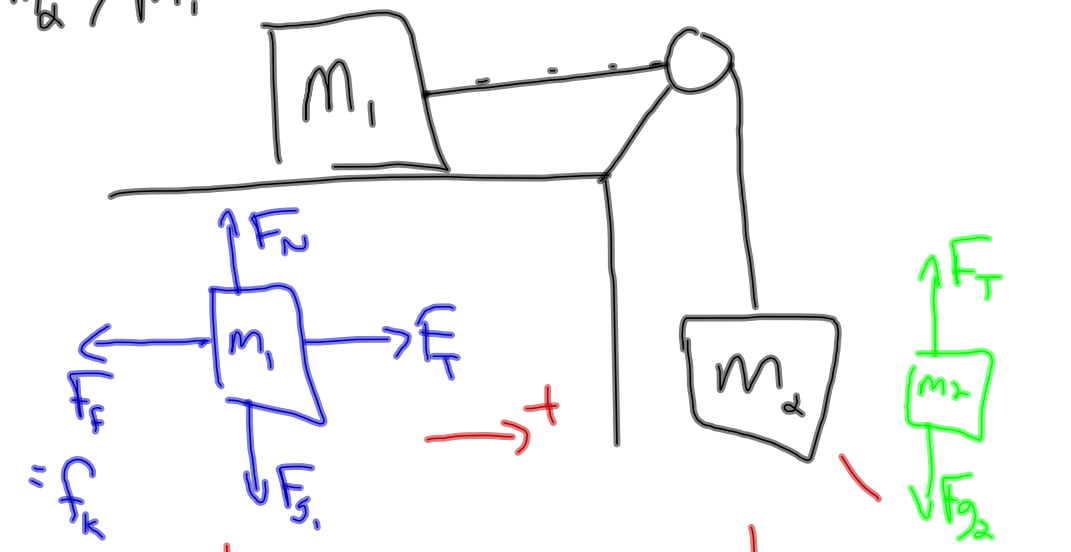
$1.8F_t + .45F_t = 1520.6$

$\frac{2.25F_t}{2.25} = \frac{1520.6}{2.25}$

$F_t = 675.8$

675.8N | 1351.6N

$m_2 > m_1$



X	Y
F_T	F_{g_1}
$-f_k$	$-F_N$
$m_1 a$	0

X	Y
	F_{g_2}
$-F_T$	
	$m_2 a$

$\sum F = ma$ ↓ +

$F_T - f_k = m_1 a$ $\quad f_k = \mu_k F_N$

$F_{g_1} - F_N = 0$ $\quad m_1 g = F_N$

$F_{g_2} - F_T = m_2 a$ $\quad$ usually given

$F_T - \mu_k m_1 g = m_1 a$

$F_N = m_1 g$

$m_2 g - F_T = m_2 a$

Usually asked for a or F_T