

**INCLINED PLANE**

NEWTON'S 2nd LAW IN X DIRECTION

I  $T - f - mg \sin \theta = ma_x$

NEWTON'S 2nd LAW IN Y DIRECTION

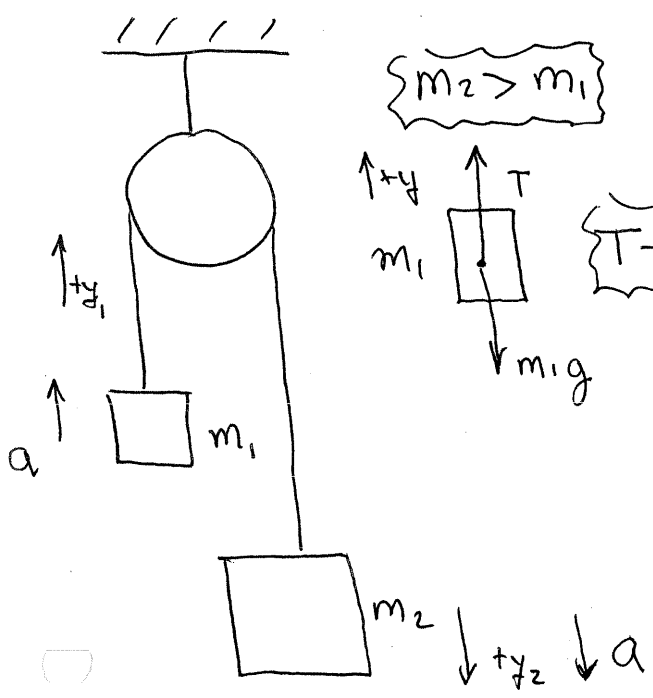
II  $N - mg \cos \theta = 0$

$a_y = 0$ , ALSO NEWTON FIRST LAW...

Kinetic Friction

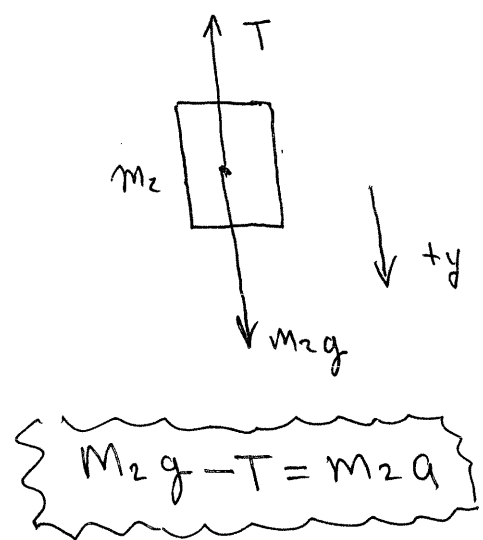
$f = \mu_k N = \mu_k \overbrace{mg \cos \theta}^N$   
 ↑ II

**PULLEY AND TWO MASSES**



$m_2 > m_1$

$T - m_1 g = m_1 a$



$m_2 g - T = m_2 a$

ELIMINATE T and SOLVE FOR a