

$$T = mg - ma$$

$$\mu_k = \frac{mg - ma - Mg \sin \theta - Ma}{Mg \cos \theta}$$

~~$$\mu_k = \frac{M(A) + T - mg \sin \theta}{Mg \cos \theta}$$~~

~~$$\mu_k = \frac{-A + T - mg \sin \theta}{Mg \cos \theta}$$~~

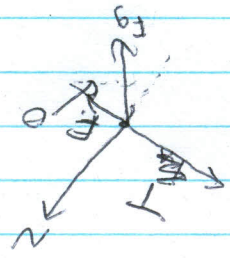
~~$$\mu_k = \frac{-A + T - g \sin \theta}{Mg \cos \theta}$$~~

$$T + mg \sin \theta + f = \mu(A)$$

$$-T + mg \sin \theta + \mu_k Mg \cos \theta = M(-A)$$

$$\mu_k Mg \cos \theta = M(A) + T - mg \sin \theta$$

$$\mu_k = \frac{M(A) + T - mg \sin \theta}{Mg \cos \theta}$$

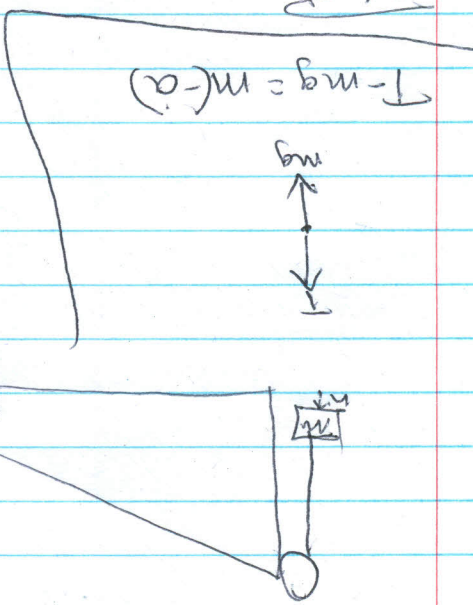


$$-T + mg \sin \theta + \mu_k Mg \cos \theta = -Ma$$

$$\mu_k Mg \cos \theta = T - Mg \sin \theta - Ma$$

$$-A = \frac{-T}{m} + g \sin \theta + \mu_k \cos \theta$$

$$A = \frac{T}{m} - g \sin \theta - \mu_k \cos \theta$$



$$T - mg = m(-a)$$