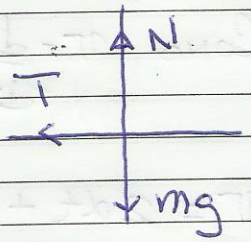
Fecha

6.75 Datos

$m = 0.09\ kg$
$R_1 = 0.4\ m$
$v_1 = 0.7\ m/s$
$R_2 = 0.10\ m$
$v_2 = 2.8\ m/s$
$T_1 - ?$
$T_2 - ?$
$W - ?$



(a

Para el caso de R_1 y v_1

$$T_1 = \frac{m \cdot v_1^2}{R_1} = \frac{(0.09)(0.7)^2}{0.4} = 0.11\ N$$

Para el caso de R_2 y v_2

$$T_2 = \frac{m \cdot v_2^2}{R_2} = \frac{(0.09)(2.8)^2}{0.1} = 7.1\ N$$

$$W_T = \Delta E_c = \frac{m v_2^2}{2} - \frac{m v_1^2}{2} = \frac{(0.09)(2.8)^2}{2} - \frac{(0.09)(0.7)^2}{2}$$

$$W_T = 0.33\ J$$