...se encuentran estáticas y ninguna de las... empuja a una caja B de 4.00 kg contra una ... fuerza F_E de 30 N
...sta todas las fuerzas ...
hubiera

1. $\Sigma F_y = m \cdot a_y$

$F_N - F_g = m \cdot a_y$ $\quad a_y = 0$

$F_N - 93.195 N = 0$

$F_N = 93.195 N$

$32.5 N + F_B - 0.580(93.195 N) = 20.52 N$

$F_B = 42.0931 N$

2. a. $F_g = (120 kg)(9.81 m/s^2)$ $\quad F_T - 1177.2 N = 0$

$F_T = 1177.2 N$

b. F_T

$F_g = (120 kg + 2(70 kg))(9.81 m/s^2)$ $\quad \Sigma F_y = m \cdot a_y$

$F_T - 2550 N = 0$

$F_T = 2550.6 N$

$F_g = (120 kg + 2(70 kg))(9.81 m/s^2)$ $\quad \Sigma F_y = m \cdot a_y$

$F_T - 2550.6 N = 0$

$F_T = 2550.6 N$

3. $\mu = \frac{f_f}{F_N} = \frac{9020.2 N}{15500 N}$ **$\mu = 0.58$**

4.
a) $a = \frac{8-2}{6-4} = \frac{6}{2} = 3 m/s^2$

$F_R = (113 kg)(3 m/s^2)$

$F_R = 339 N$

b) **6 - 8, 12 - 14**

5)

$106.25 N + 45.8 N + F_B - 0.37(638.53 N) = 0$

$F_B = 65.05 N$

6)

$0.939 F_c + 0.343 F_c = 1167.39$

$1.282 F_c = 1167.39$

a. $F_c = 910 N$

b. $\frac{1220.82 - 720.63}{117} =$

$4.2 m/s^2$

c. $\mu = \frac{f_f}{F_N} = \frac{282.5}{1108.53} =$ **$\mu = .25$**