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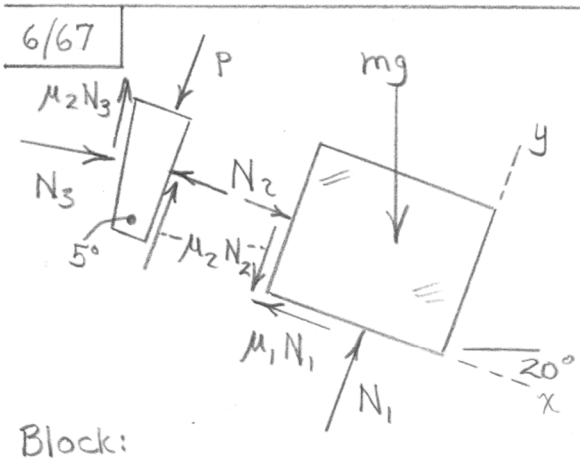

$$\begin{cases} \mu_1 = 0.7 \\ \mu_2 = 0.4 \\ mg = 27(9.81)\ \text{N} \end{cases}$$

Block:

$$\begin{cases} \Sigma F_x = 0: & mg\sin 20^\circ + N_2 - \mu_1 N_1 = 0 \quad (1) \\ \Sigma F_y = 0: & -mg\cos 20^\circ + N_1 - \mu_2 N_2 = 0 \quad (2) \end{cases}$$

Wedge:

$$\begin{cases} \Sigma F_x = 0: & N_3\cos 5^\circ - \mu_2 N_3 \sin 5^\circ - N_2 = 0 \quad (3) \\ \Sigma F_y = 0: & N_3\sin 5^\circ + \mu_2 N_3 \cos 5^\circ + \mu_2 N_2 - P = 0 \quad (4) \end{cases}$$

Solution: $N_1 = 295\ \text{N}$ $N_2 = 116.2\ \text{N}$

$N_3 = 120.8\ \text{N}$ $P = \underline{105.1\ \text{N}}$