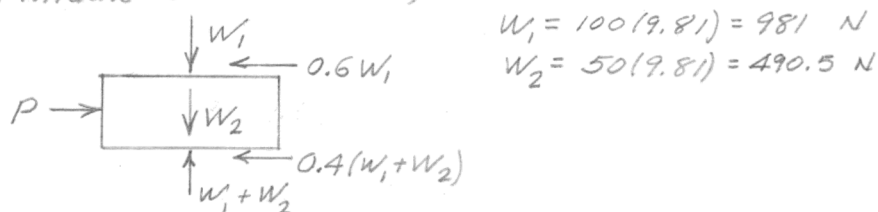


6/24 There are two possibilities

(a) Middle block moves; bottom one does not

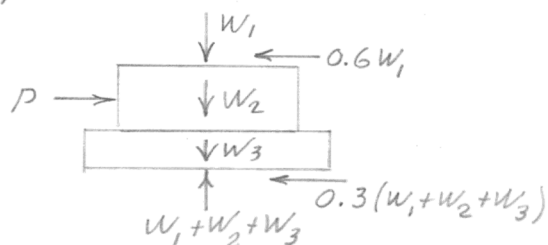


$$W_1 = 100(9.81) = 981 \text{ N}$$

$$W_2 = 50(9.81) = 490.5 \text{ N}$$

$$\Sigma F = 0; \quad P = 0.6(981) + 0.4(981 + 490.5) = 1177 \text{ N}$$

(b) Bottom block moves with middle block



$$W_3 = 20(9.81) = 196.2 \text{ N}$$

$$\Sigma F = 0; \quad P = 0.6(981) + 0.3(981 + 490.5 + 196.2) = 1089 \text{ N}$$

$1088 < 1177$ so case (b) occurs $\therefore \underline{P = 1089 \text{ N}}$

WILEY