

SOLUTION OF HOMEWORK NO. 13

PROB (8-18) (Text P393)

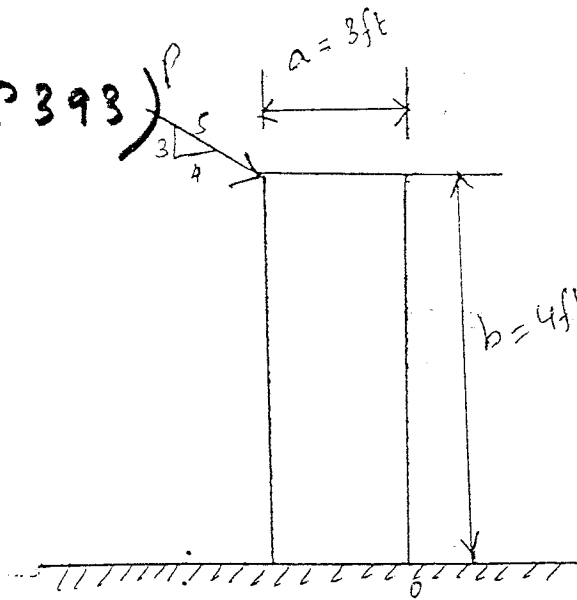
$$W = 100 \text{ lb}$$

$$a = 3 \text{ ft}$$

$$b = 4 \text{ ft}$$

$$\mu_s = 0.50$$

$$P = ?$$

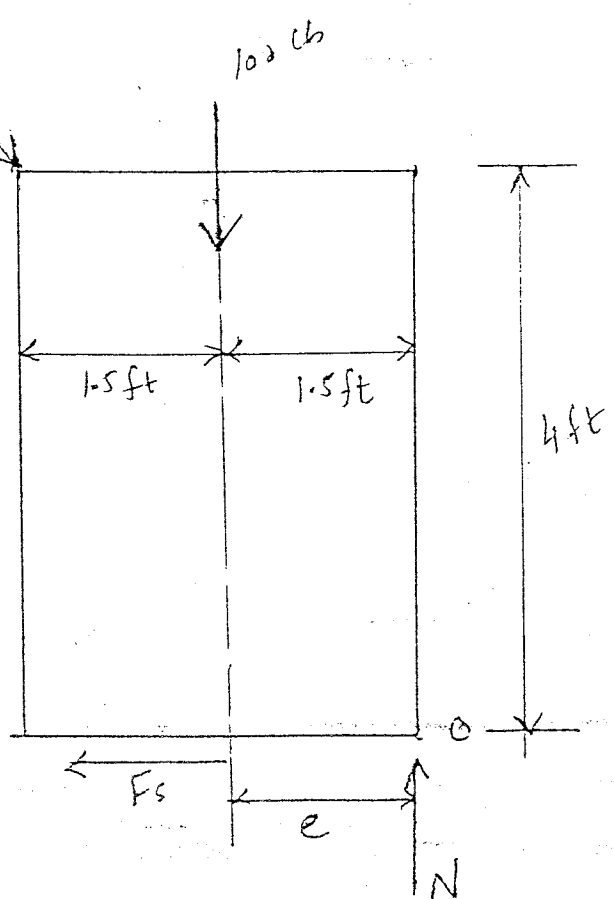


1) Assume Drum is tipping

$$\sum M_{O} = 0$$

$$\frac{3}{5} P (3) - \frac{4}{5} P (4) + 100 (1.5) = 0$$

$$\Rightarrow P = 107.14 \text{ lb}$$



(1)