

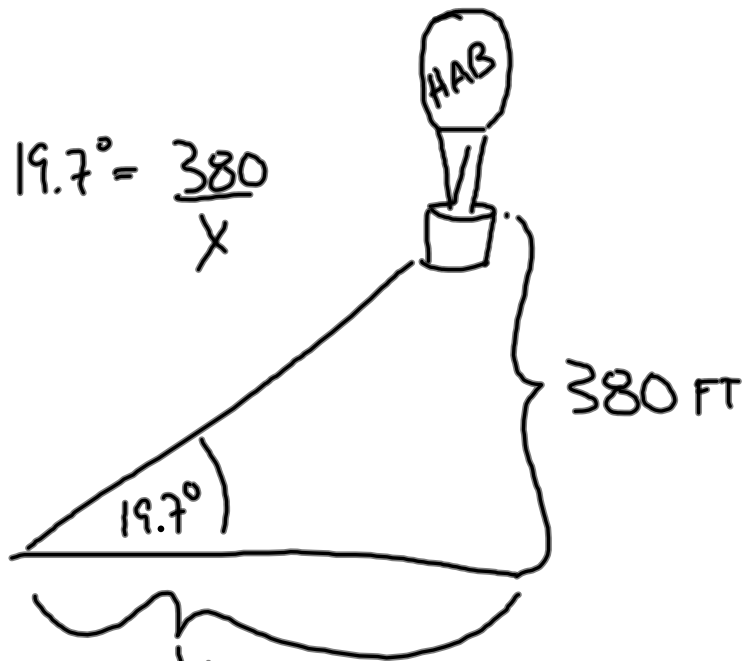
119.23 N
P_y

$50 \sin 25^\circ - W$

~~$-21.13 \text{ N} - 98.1 \text{ N} + F_N = 0 \quad F_N =$~~
 $+21.13 + 98.1 + F_N = 21.13 + 98.1$

TOA

$$\tan 19.7^\circ = \frac{380}{x}$$



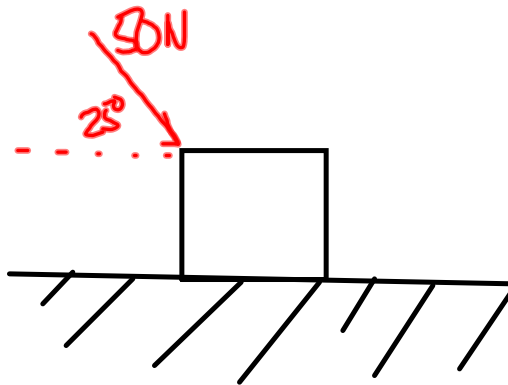
$$x = \left[\frac{380}{\tan 19.7} \right] x$$

$$x = \frac{380}{.35805} = 1061.3 \text{ FT}$$

MASS \rightarrow KILOGRAMS

WEIGHT \rightarrow NEWTONS

$$W = mg$$



$$\sum F'_s{}_y = ma_y$$

$$+F_N - W - y = 0$$

$$F_N - 98.1 - 21.13 = 0$$

$$F_N = 119.4 \text{ N}$$

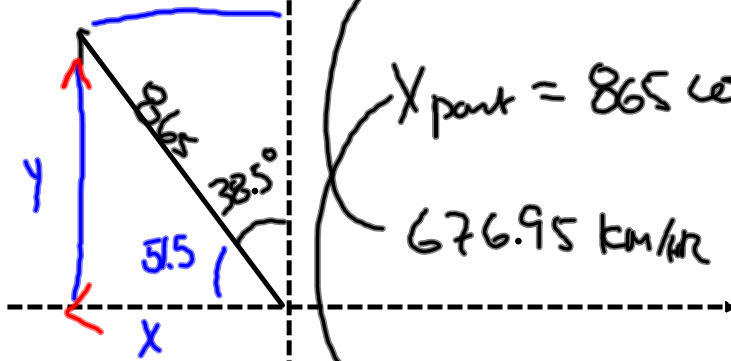
$$.4226 = \frac{y}{50}$$
$$y = 21.13 \text{ N}$$

$$W = mg = 98.1 \text{ N}$$

SOH
CAH
TOA

$$\begin{array}{l} 38.5 = \frac{\quad}{\quad} \\ 0.6225 \cdot 865 \\ 538.47 = N \end{array}$$

$$\begin{array}{l} \cos 51.5 = \frac{\quad}{\quad} \\ .6225 = 538.47 \checkmark \end{array}$$



$$y_{part} = 865 \sin 51.5^\circ$$

$$x_{part} = 865 \cos 51.5^\circ$$

$$676.95 \text{ km/hr}$$

$$538.475 \text{ km/hr}$$

$$\therefore \text{DIST } N = (676.95 \text{ km/hr}) (3 \text{ hr})$$

$$\therefore \text{" } W = 538.475 \text{ km/hr} (3 \text{ hr})$$

TOA

$$\tan \theta = \frac{1}{23}$$

$$\theta = \tan^{-1} \frac{1}{23}$$

$$c = \sqrt{(23)^2 + (1)^2}$$

$$c = 23.02$$

$$\theta = 2.48^\circ$$

