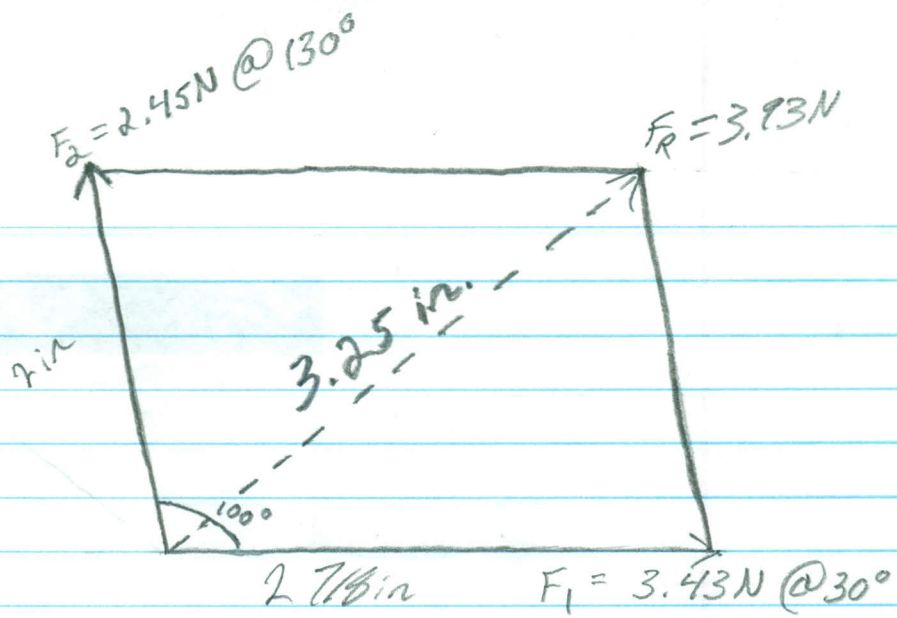


Tyler
Mittner



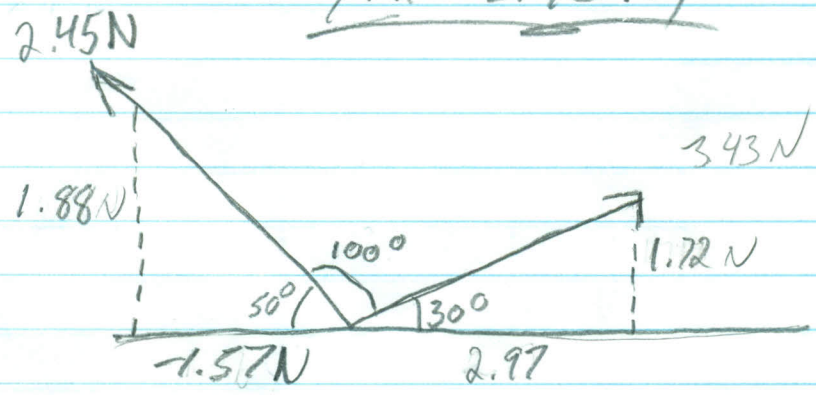
$3\frac{1}{4}$ in. - Resultant

$$\frac{2.45N}{2in} = 1.23$$

$$\frac{3.43N}{2.875in} = 1.19$$

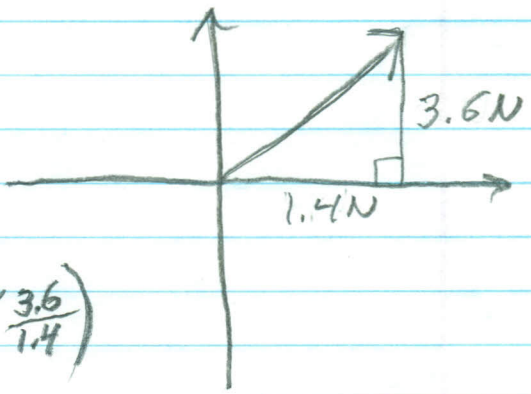
Ratio = 1.21 = $F_R = 3.93$ L-length
 $L_R = 3.25$ F-Force
 $1.21 \cdot 3.25 = 3.93$

$F_R = 3.93N$



$$\sum F_x = -1.57N + 2.97N = 1.4N$$

$$\sum F_y = 1.88N + 1.715N = 3.6N$$



$$F_R = \sqrt{3.6^2 + 1.4^2} = 3.86N$$

$$\theta = \tan^{-1}\left(\frac{3.6}{1.4}\right) = 68.75^\circ$$