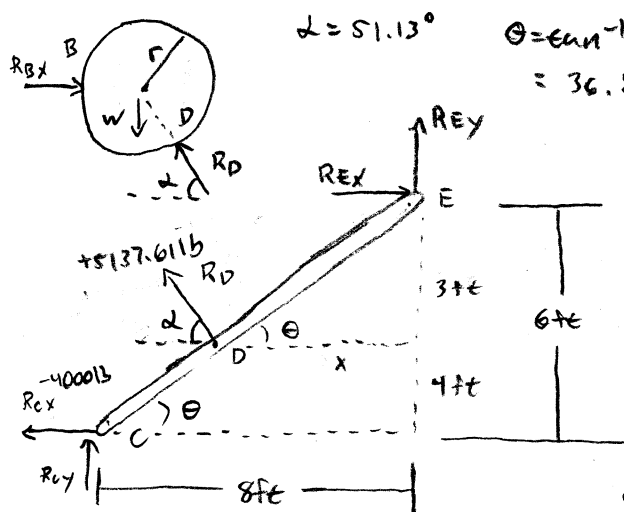
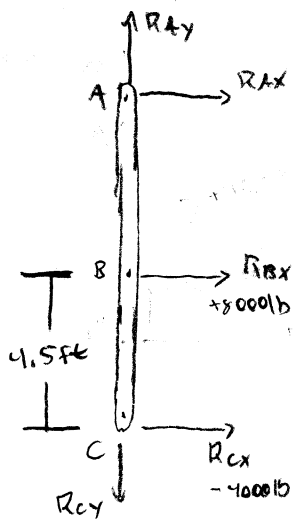


(a) $R_{EX} = 2 \text{ kips} \leftarrow$
 $R_{EY} = 2.25 \text{ kips} \uparrow$
 (b) $R_{CX} = 4.00 \text{ kips} \leftarrow$
 $R_{CY} = 5.75 \text{ kips} \uparrow$



$\alpha = 51.13^\circ$
 $\theta = \tan^{-1}\left(\frac{6}{8}\right) = 36.86^\circ$

$\sin(36.86) = \frac{3}{X}$
 $X = \frac{3}{\sin(36.86)}$
 $= 5 \text{ ft}$

$d_2 = \sqrt{8^2 + 6^2}$
 $= 10 \text{ ft}$

$d_1 = 9 - 6 = 3 \text{ ft} + 1.5 \text{ ft} = 4.5 \text{ ft}$

Consider the pipe

$\sum M_B = 0, -(1.5 \text{ ft})(8000 \text{ lb}) + (1.5 \text{ ft})(R_D \sin(51.13)) = 0$
 $R_D = 10275 \text{ lb}$

Consider CDE

$\sum F_x = 0, -(-4000 \text{ lb}) - (5137.61 \cos(51.13)) + R_{EX} = 0$