



SUM MOMENT ABOUT PIVOT POINT = 0

$$F_{D1}(2.236) = F_{C1}(1.414)$$

$$F_D(\cos 63.435^\circ) = F_{C1}(1.414)$$

$$40(\cos 63.435^\circ) = F_{C1}(1.414)$$

$$F_{C1} = \underline{12.65 \#}$$

THEREFORE:

$$F_C = \frac{F_{C1}}{\cos 59^\circ}$$

$$F_C = \underline{24.56 \#}$$

$$F_{C2} = 24.56(\sin 59^\circ)$$

$$F_{C2} = \underline{21.05 \#}$$

$$F_D = \underline{40 \#}$$

$$F_{D1} = F_D(\cos 63.435^\circ) = \underline{17.89 \#}$$

$$F_{D2} = F_D(\sin 63.435^\circ) = \underline{35.78 \#}$$

