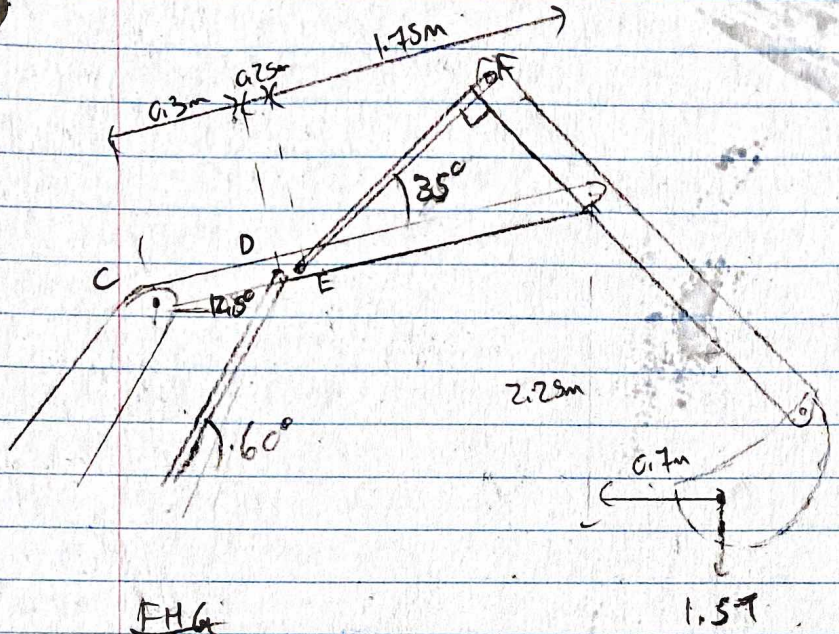
Solutions: 21-S-6.6-MK-02

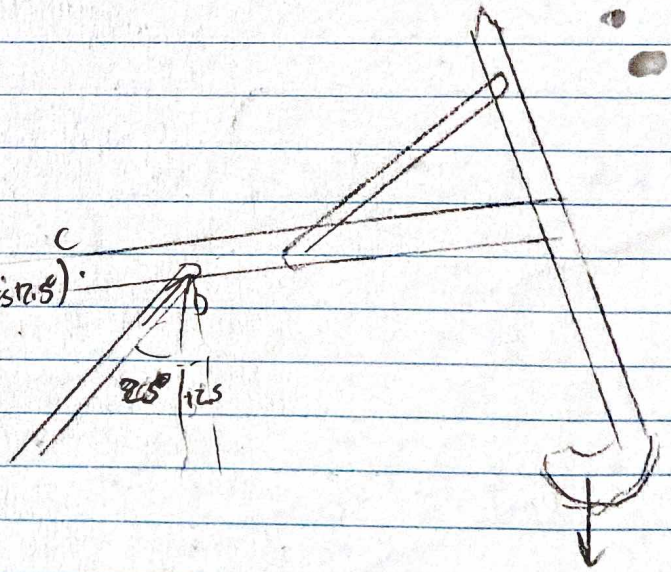


FHG

$\circlearrowleft \Sigma M_H = 0 = (1500\,kg)(9.81\,m/s^2)(0.7m) - F_{EF}(\sin 35)(1.75)$

$F_{EF} = 10261.93\,N \quad (T)$

C-F: PHG



$\circlearrowleft \Sigma M_C = (0.3m)(\cos 35)(F_{AD}) - (1500)(9.81)(0.7 + 2.3\cos 12.5°)$

$F_{AD} = \dfrac{(1500\,kg)(9.81)(0.7 + 2.3\cos 12.5°)}{(0.3)(\cos 35°)}$

$F_{AD} = 118210.81\,N\,(C)$