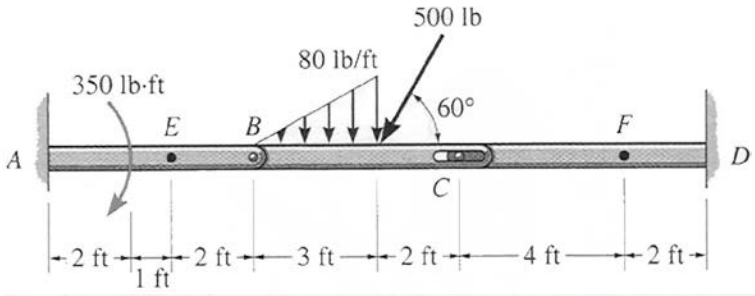
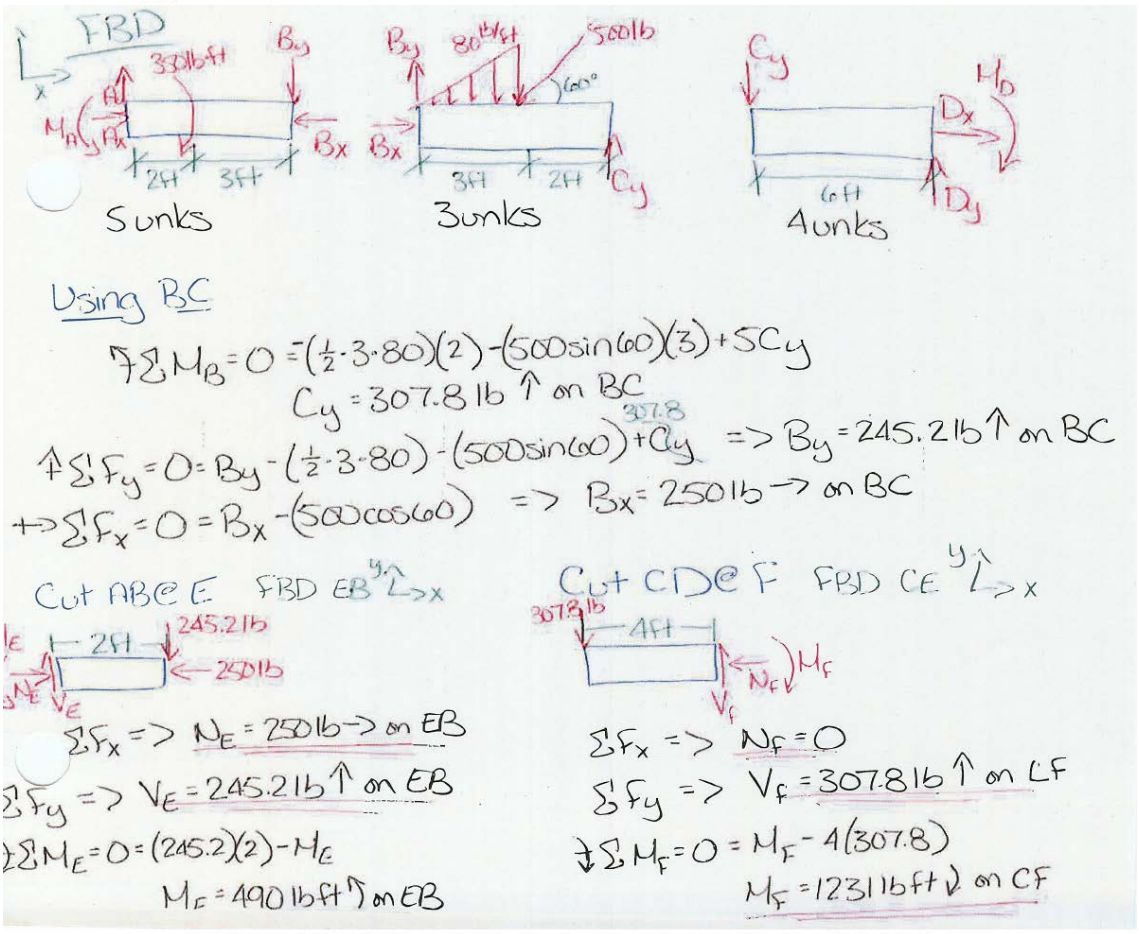
Problem 1: Determine the internal forces at points *E* and *F*. Member *BC* is pinned at *B* and there is a smooth slot at *C*. The pin at *C* is fixed to member *CD*.





ANSWER: C_y = 308 lb ↑, B_y = 245 lb ↑, B_x = 250 lb → all on BC
N_e = 250 lb → on EB, V_e = 245 lb ↑ on EB, M_e = 490 lb*ft CCW on EB
N_f = 0, V_f = 308 ↑ on CF, M_f = 1231 lb*ft CW on CF