Question (1) For the following four cases:

1. Calculate the force in each member of the truss

2. Draw the NFD, SFD, and BMD for the columns C1 and C2

3. Determine the maximum force affecting each member in the shown truss for the following cases:

    a. Dead load + live load

    b. Dead load + live load + wind (left to right)

    c. Dead load + live load + wind (right to left)

    d. Dead load + wind (left to right)

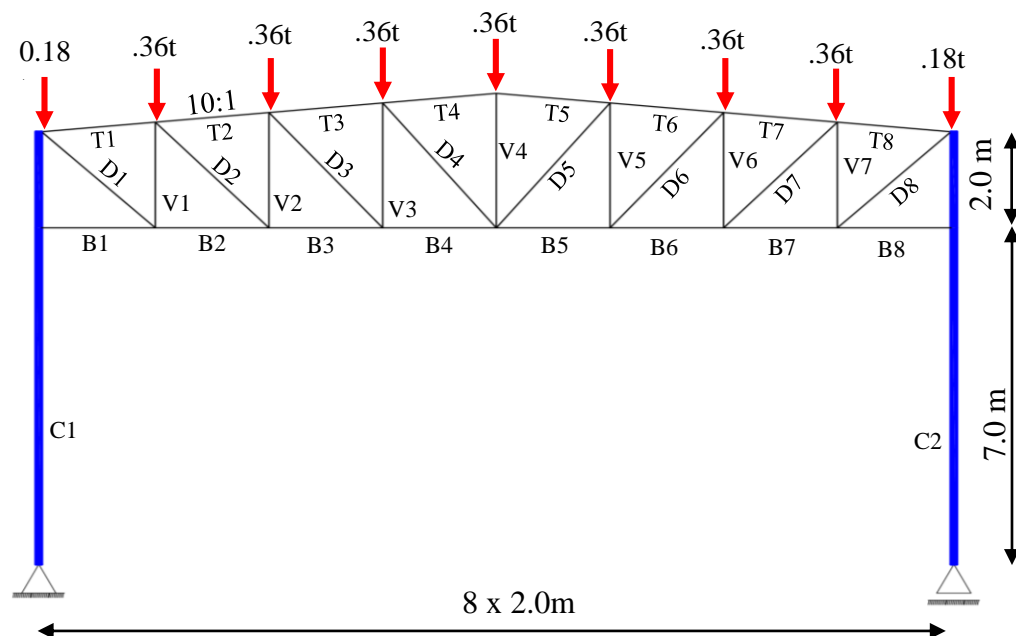   e. Dead load + wind (right to left)

Note:

B for bottom chord members
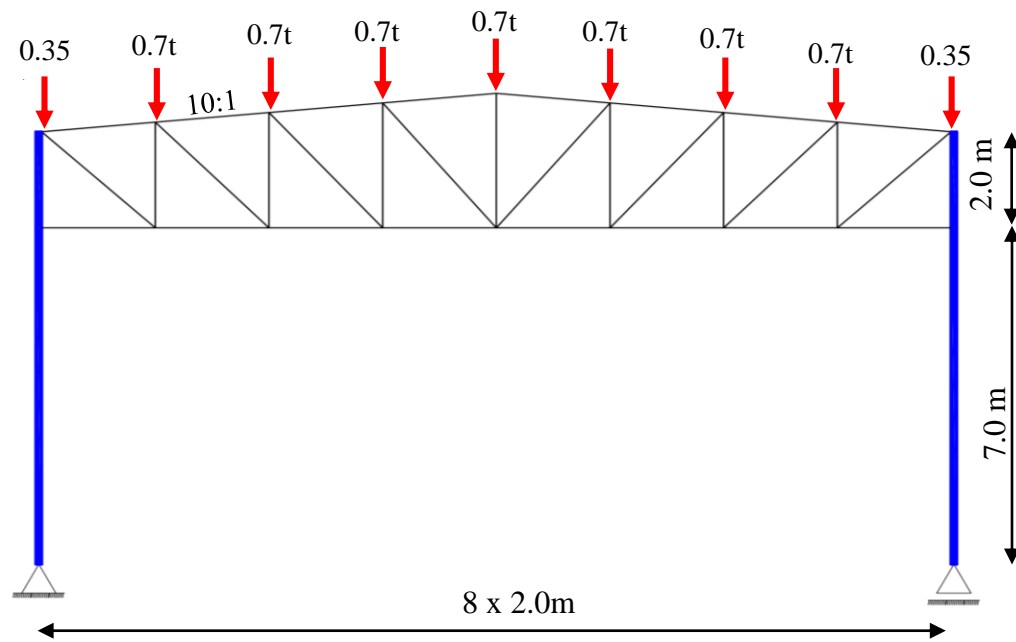
T for top chord members

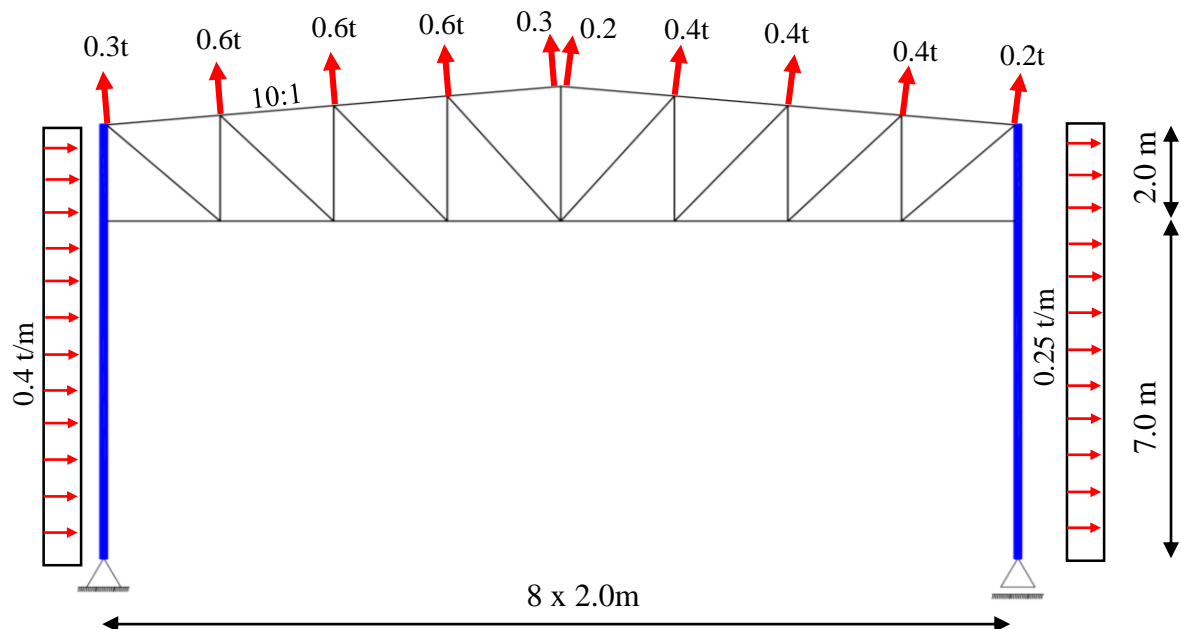V for vertical members

D for diagonal members

C for columns

Case 1: Dead Load

Case 2: Live Load

Case 3: Wind (left to right)

Case 4: Wind (right to left)