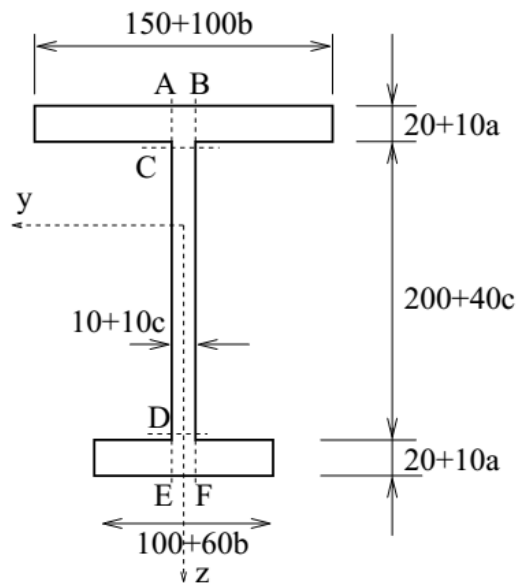


- 1) Determine the shear stress and the shear flow for a given I-shape cross section loaded by the shear force $V_z = (60 + 10c)$ kN.
 - a) Draw the distribution diagrams of the shear stress and the shear flow (sketch their direction as well).

The checked values are:

- Shear flow in A, B, C, D, E, F sections [kN/m]
- Shear stress in C and F sections [MPa]
- Maximum shear stress [MPa]

Note: Put the values with appropriate signs based on the given coordinate system.



- 2) Determine the shear stress (τ_{xz}) for a given pentagon type of the cross section loaded by the shear force $V_z = (200 + 30a)$ kN.
 - a) Draw the distribution diagram of the shear force.

The checked value is:

- Maximum shear stress [MPa]

