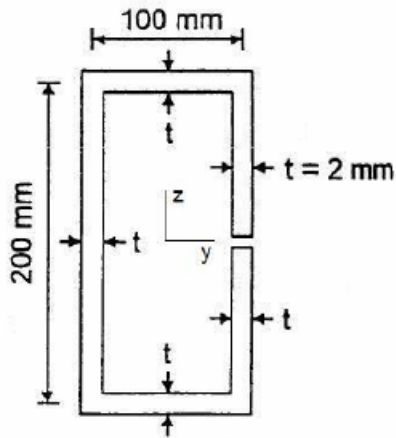


## EAS4200C Aerospace Structures Homework #8 (Due: Nov. 6th)

1 Find the flexural shear flow produced by the transverse shear force  $V_z = 1,000\text{N}$  in the beam with the thin-walled section given in the figure. Sketch the shear flow on the cross-section. Assume that  $V_z$  is applied at the shear center.



2. Find the shear center of the cross-section above.

3. Find the shear flow for the three-stringer section shown in the figure for  $V_z = 5,000\text{N}$  and  $V_y = 0$ . Given shear modulus  $G = 27\text{GPa}$ , find the twist angle per unit length. Also determine the shear center. Is the shear flow statically determinate?

