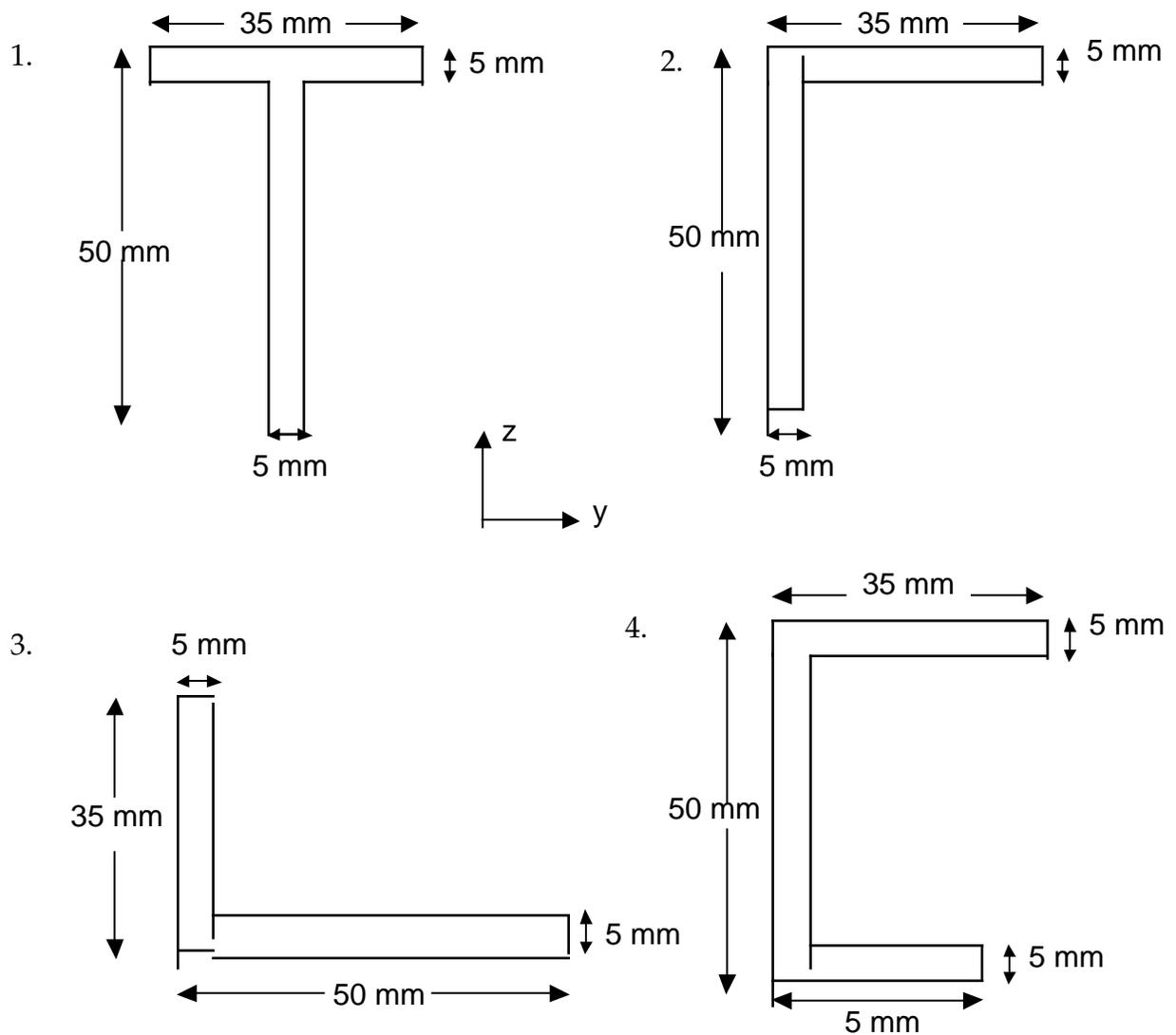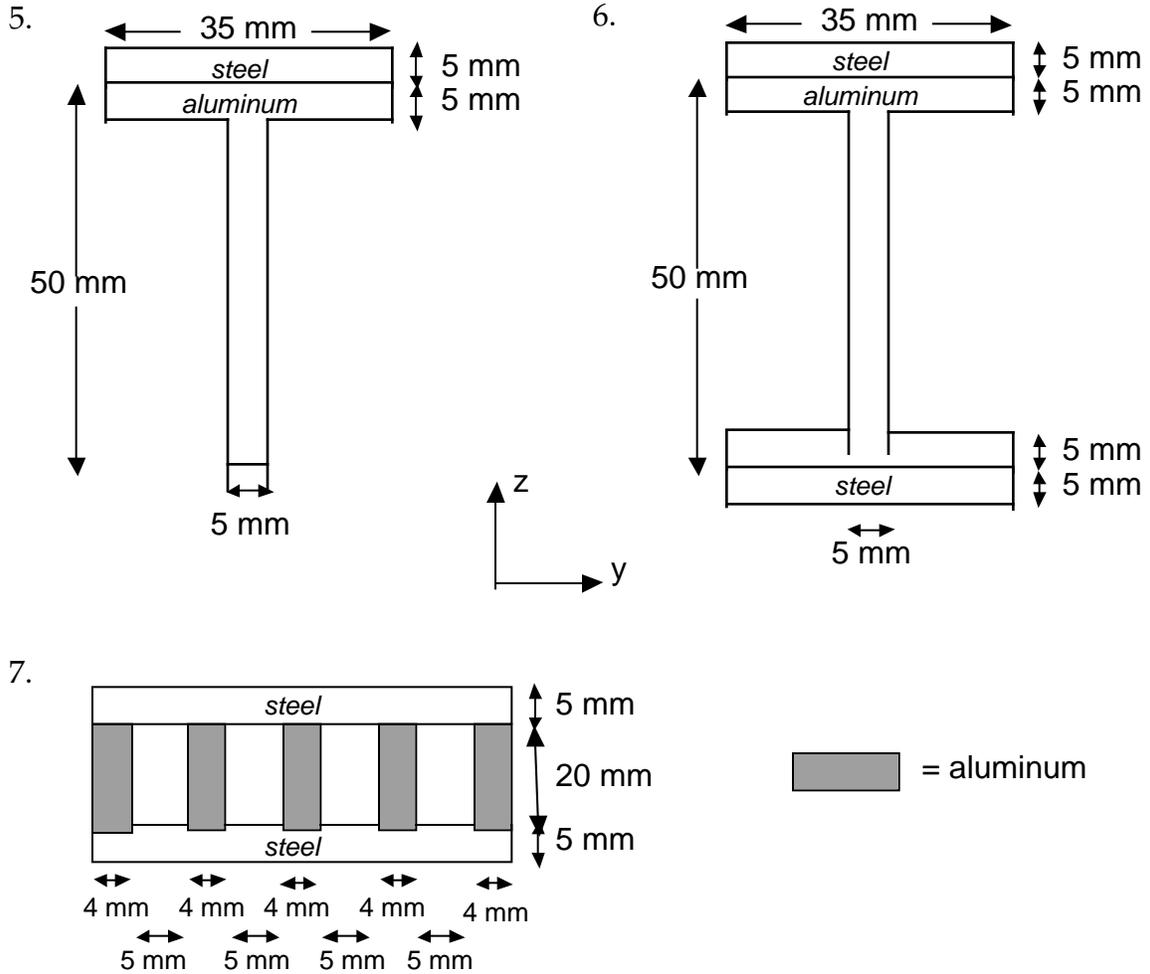# HOME ASSIGNMENT #8 *(Part A)*

Warm-Up Exercises

Determine the bending moments of inertia (I_z, I_y, I_{yz}) for the following cross-sections:

1.

35 mm

50 mm

5 mm

5 mm

2.

35 mm

50 mm

5 mm

5 mm

z

y

3.

5 mm

35 mm

50 mm

5 mm

4.

35 mm

5 mm

50 mm

5 mm

5 mm

The following beam cross-sections are made from a combination of aluminum
(E = 10 Msi, ν = 0.30) and steel (E = 30 Msi, ν = 0.30). Determine the bending
stiffness, EI, about the y-axis for the following cases:

5.

6.

7.

Practice Problems

8. *in Part B*

Application Tasks

9. *in Part B*