

Assignment #3

1. Calculate Stress of each element

$$\Delta T = 100^{\circ}\text{C}$$

$$t = 5 \text{ mm}$$

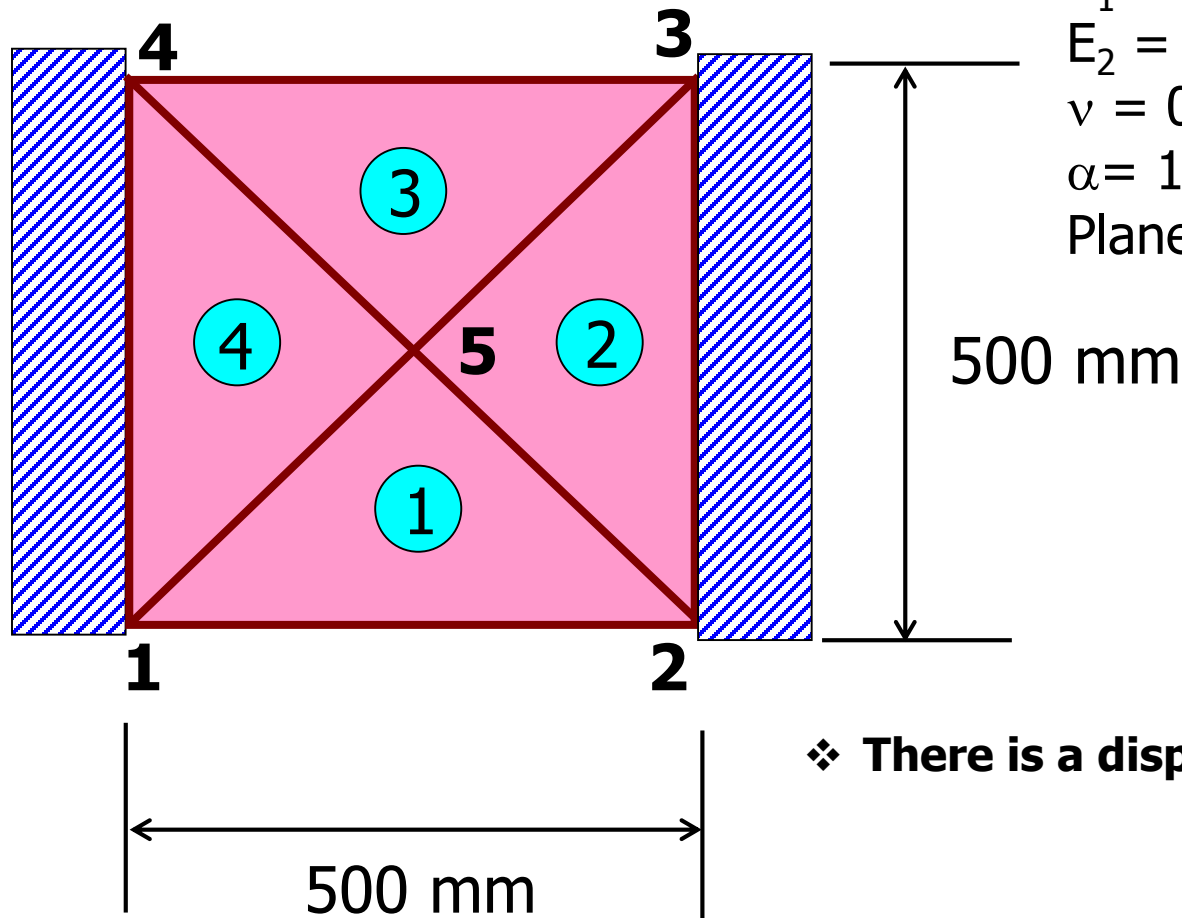
$$E_1 = E_4 = 70 \text{ GPa}$$

$$E_2 = E_3 = 210 \text{ GPa}$$

$$\nu = 0.3$$

$$\alpha = 12.0 \times 10^{-6} \text{ (mm/mm)/}^{\circ}\text{C}$$

Plane Stress Condition



❖ There is a displacement in node 5