



$$L = 5 \text{ cm}$$

Mass unit $L \times L$ square

$$X_{cm} = \frac{M_A X_A + M_B X_B + M_C X_C + M_D X_D}{M_A + M_B + M_C + M_D}$$

~~$$= \frac{4(2 \times 5 \text{ cm}) + 6(2 \times 5 \text{ cm}) + 4(2 \times 2 \text{ cm}) + 8(2 \times 5 \text{ cm})}{4 + 6 + 4 + 8}$$~~

$$= \frac{4(10 \text{ cm}) + 6(-5 \text{ cm}) + 4(5 \text{ cm}) + 8(-5 \text{ cm})}{4 + 6 + 4 + 8}$$

$$= \frac{-10}{22} = \underline{\underline{-0.4545 \text{ cm}}}$$

$$Y_{cm} = \frac{4(12.5) + 6(7.5) + 4(-15) + 8(-10)}{22}$$

$$= \frac{-45}{22} = \underline{\underline{-2.0455 \text{ cm}}}$$