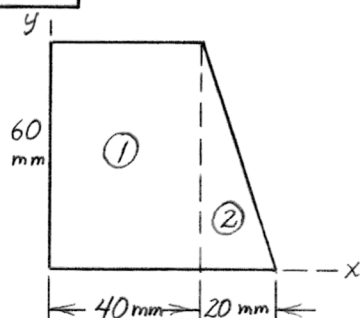


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$$\textcircled{1} A_1 = 40(60) = 2400 \text{ mm}^2$$

$$\bar{x}_1 = 20 \text{ mm}, \bar{y}_1 = 30 \text{ mm}$$

$$\textcircled{2} A_2 = \frac{1}{2}(20)(60) = 600 \text{ mm}^2$$

$$\bar{x}_2 = 40 + \frac{20}{3} = 46.7 \text{ mm}$$

$$\bar{y}_2 = \frac{60}{3} = 20 \text{ mm}$$

$$\bar{X} = \frac{\sum A\bar{x}}{\sum A} = \frac{2400(20) + 600(46.7)}{2400 + 600} = \underline{25.3 \text{ mm}}$$

$$\bar{Y} = \frac{\sum A\bar{y}}{\sum A} = \frac{2400(30) + 600(20)}{2400 + 600} = \underline{28.0 \text{ mm}}$$

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