

[5.1절]

5.30 S; 선재의 도심 위치

A;  $a = 80 \text{ mm}$ ,  $b = 60 \text{ mm}$  $BCD$  is horizontal  $\Rightarrow \bar{X} = 0$ 

$$\Rightarrow \Sigma(\bar{x}l) = 0$$

$$\textcircled{1} \quad l = L$$

$$\bar{x} = \frac{L}{2}$$

$$\textcircled{2} \quad l = a = 80 \text{ mm}$$

$$\bar{x} = -\frac{1}{2}a = -40 \text{ mm}$$

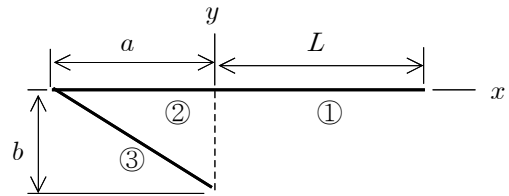
$$\textcircled{3} \quad l = \sqrt{a^2 + b^2} = 100 \text{ mm}$$

$$\bar{x} = -\frac{1}{2}a = -40 \text{ mm}$$

$$\Sigma(\bar{x}l) = \frac{L}{2} L + (-40 \text{ mm})(80 \text{ mm}) + (-40 \text{ mm})(100 \text{ mm}) = 0$$

$$\Rightarrow \frac{L^2}{2} = 7,200 \text{ mm}^2 \quad \Rightarrow \quad L = 120.0 \text{ mm}$$

M;

R; (과정의 타당성 검토) (예:  $\bar{Y}$  를 구하지 않아도 되는 이유 서술)T; (결과의 의미 검토) (예:  $\Sigma(\bar{x}l) = 0$  의미,  $\bar{X} \Sigma l = 0 \Rightarrow \bar{X} = 0$ , 서술)