



선분 위의 점.

$$(a, b) + \alpha(c-a, d-b)$$

$$(i, j) + \beta(k-i, l-j)$$

두개가
같다.

$$a + \alpha(c-a) = i + \beta(k-i)$$

$$b + \alpha(d-b) = j + \beta(l-j)$$

$\Rightarrow \alpha, \beta$ 에 대해서 정리

$$\left\{ \underbrace{(l-j)(c-a) - (d-b)(k-i)}_{\text{left}} \right\} \alpha$$

$$= \underbrace{(l-j)(\bar{i}-a) - (j-b)(k-i)}_{\alpha\text{-right.}}$$

$$! \quad 0 \leq \alpha \leq 1$$

$$\rightarrow \text{left 의 } \frac{1}{2} \equiv \alpha\text{-right}$$

$$\rightarrow |\text{left}| > |\alpha\text{-right}|$$

$$\rightarrow \beta \in \frac{c-f}{7} \in \mathbb{Q}.$$