

8Q → a)

$$a = \prod_{i=0}^K p_i^{e_i}$$

Temos que $a = (p_1^{e_1} \cdot p_2^{e_2} \cdot p_3^{e_3} \dots)$

$$\text{Logo, } a^2 = (p_1^{e_1} \cdot p_2^{e_2} \cdot p_3^{e_3} \dots)^2$$

Assim, podemos concluir que:

$$a^2 = \prod_{i=0}^K p_i^{e_i} \cdot \prod_{i=0}^K p_i^{e_i} \Rightarrow$$

$$\Rightarrow \prod_{i=0}^K p_i^{e_i} \cdot p_i^{e_i}$$