



$$I = \langle x^2 y, x y^2 \rangle$$

$$x^2 y^2$$

Dübel:

$$J = \langle x^\alpha \mid \exists n \in \mathbb{N}, x^\alpha y^n \in I \rangle$$

$$I = \langle A \rangle$$

$$(x_1, \dots, x_{n-1}, y)$$

$$J = \langle x^{\alpha_1}, \dots, x^{\alpha_s} \rangle$$

\Rightarrow multi m_i

$$J_i = \langle x^\beta \mid x^\beta y^{m_i} \in I \rangle = \langle x^{\alpha_{i,1}}, \dots, x^{\alpha_{i,s_i}} \rangle \quad m = \max\{m_i\}$$

$$\{0, \dots, m-1\}$$

$$I = \langle x^{\alpha_{1,1}} y^{m_1}, \dots, x^{\alpha_{1,s_1}} y^{m_1}, \dots, x^{\alpha_{r,1}} y^{m_r}, \dots, x^{\alpha_{r,s_r}} y^{m_r} \rangle$$