rengas: $\mathbb{Q}[u_1, u_2, x_1, x_2, x_3, x_4]$. $\sqrt{\mathcal{I}} = \mathcal{I}_1 \cap \mathcal{I}_2 \cap \mathcal{I}_3 \cap \mathcal{I}_4$ missä

$$\begin{aligned}
\mathcal{I}_1 &= \begin{cases} x_2\, x_3^2 + x_2\, x_4^2 - 4\, x_3^2\, x_4 \\ x_1\, x_4 + x_2\, x_3 - 4\, x_3\, x_4 \\ x_1\, x_3 - x_2\, x_4 \\ x_1^2 + x_2^2 - 4\, x_2\, x_4 \end{cases} \\
\mathcal{I}_2 &= \{x_2, x_1, u_2 - 4x_4, u_1\} \\
\mathcal{I}_3 &= \{x_2, x_1, u_1 - 4x_3, u_2\} \\
\mathcal{I}_4 &= \{u_1, u_2\}
\end{aligned}$$

$f = (x_3 - u_1/2)^2 + x_4^2 - (x_3 - x_1)^2 - (x_4 - x_2)^2$. $f \notin \mathcal{I}$, mutta $f \in \mathcal{I}_1$

rengas: $\mathbb{Q}(u_1, u_2)[x_1, x_2, x_3, x_4]$.

$$\mathcal{I} = \{u_1 - 4x_3, u_2 - 4x_4, (u_1^2 + u_2^2)\, x_1 - u_1\, u_2^2, (u_1^2 + u_2^2)\, x_2 - u_1^2 u_2\}$$

$f \in \mathcal{I}$