

Multiplying the basic relation (*) by \tilde{l} - and recalling that $\tilde{l}^3 = 0$ - we have

$$\tilde{l} \cdot \zeta^3 - 9 \tilde{l}^2 \cdot \zeta^2 = 0$$

and hence

$$\tilde{l} \cdot \zeta^3 = 9.$$

$$\Gamma \quad \tilde{l} \cdot \zeta^3 - 9 \tilde{l}^2 \cdot \zeta^2 + 30 \underset{0}{\tilde{l}^3} \cdot \zeta = 0$$

$$\Rightarrow \tilde{l} \cdot \zeta^3 - 9 \tilde{l}^2 \cdot \zeta^2 = 0 = \tilde{l} \cdot \zeta^3 - 9 \Rightarrow \tilde{l} \cdot \zeta^3 = 9$$

\Rightarrow

Finally, multiplying (*) by ζ ,

$$\zeta^4 - 9 \tilde{l} \cdot \zeta^3 + 30 \tilde{l}^2 \cdot \zeta^2 = 0$$

$$\Rightarrow \zeta^4 = 9 \tilde{l} \cdot \zeta^3 - 30 \tilde{l}^2 \cdot \zeta^2 = 81 - 30 = 51.$$

$$\Gamma \quad \text{Since } \tilde{l} \cdot \zeta^3 = 9 \text{ and } \tilde{l}^2 \cdot \zeta^2 = 1,$$

$$\zeta^4 = 81 - 30 = 51$$

\Rightarrow

It is now possible to calculate $(6\tilde{\omega} - 2e)^5$.
First, since the class ω of a hyperplane in \mathbb{P}^5 restricts to the class $2l$ on W_2

$$\tilde{\omega}|_E = 2\tilde{l},$$