

$$\begin{array}{ccc}
\text{Sym}(V^*) & \xlongequal{\hspace{1cm}} & \text{Sym}(V^*) \\
\uparrow \ell_{\mathcal{E}} & & \uparrow \ell'_{\mathcal{E}} \\
K[\mathbf{e}_0, \dots, \mathbf{e}_n] & \longrightarrow & K[\mathbf{e}_0, \dots, \mathbf{e}_n]
\end{array}
\qquad
\begin{array}{ccc}
F(x_0, \dots, x_n) & \xlongequal{\hspace{1cm}} & F((y_0, \dots, y_n) \cdot T) \\
\uparrow & & \uparrow \\
F(\mathbf{e}_0, \dots, \mathbf{e}_n) & \longrightarrow & F(T\mathbf{e}_0, \dots, T\mathbf{e}_n)
\end{array}$$