

$$\begin{array}{ccccc}
 d\binom{x}{y} & = & \binom{x}{dy} & + & (-1)^p \binom{dx}{y} \\
 \varepsilon(p,q) \downarrow & & \downarrow \varepsilon(p,q+1) & & \downarrow \varepsilon(p+1,q) \\
 d\binom{y}{x} & = & (-1)^q \binom{dy}{x} & + & \binom{y}{dx}
 \end{array}$$