

Simplify@With [{ \mathbb{E} = MatrixExp},

$\mathbb{E}[\eta_i \rho y] \cdot \mathbb{E}[\beta_i \rho b] \cdot \mathbb{E}[\alpha_i \rho a] \cdot \mathbb{E}[\xi_i \rho x] \cdot \mathbb{E}[\eta_j \rho y] \cdot \mathbb{E}[\beta_j \rho b] \cdot$

$\mathbb{E}[\alpha_j \rho a] \cdot \mathbb{E}[\xi_j \rho x] ==$

$\mathbb{E}[\partial_{y_k} \Lambda \rho y] \cdot \mathbb{E}[\partial_{b_k} \Lambda \rho b] \cdot \mathbb{E}[\partial_{a_k} \Lambda \rho a] \cdot \mathbb{E}[\partial_{x_k} \Lambda \rho x]$]