

$$\begin{aligned}
 \underline{U} &:= \begin{bmatrix} \Delta^2 \cdot \delta_q \cdot \delta_r & \Delta^2 \cdot \delta_p \cdot \delta_r & \Delta^2 \cdot \delta_p \cdot \delta_q & 1 \\ -\Delta^2 \cdot \delta_q \cdot \delta_r & -\Delta^2 \cdot \delta_p \cdot \delta_r & \Delta^2 \cdot \delta_p \cdot \delta_q & 1 \\ -\Delta^2 \cdot \delta_q \cdot \delta_r & \Delta^2 \cdot \delta_p \cdot \delta_r & -\Delta^2 \cdot \delta_p \cdot \delta_q & 1 \\ \Delta^2 \cdot \delta_q \cdot \delta_r & -\Delta^2 \cdot \delta_p \cdot \delta_r & -\Delta^2 \cdot \delta_p \cdot \delta_q & 1 \end{bmatrix} \\
 U &:= \begin{bmatrix} \Delta^2 \delta_q \delta_r & \Delta^2 \delta_p \delta_r & \Delta^2 \delta_p \delta_q & 1 \\ -\Delta^2 \delta_q \delta_r & -\Delta^2 \delta_p \delta_r & \Delta^2 \delta_p \delta_q & 1 \\ -\Delta^2 \delta_q \delta_r & \Delta^2 \delta_p \delta_r & -\Delta^2 \delta_p \delta_q & 1 \\ \Delta^2 \delta_q \delta_r & -\Delta^2 \delta_p \delta_r & -\Delta^2 \delta_p \delta_q & 1 \end{bmatrix} \tag{1}
 \end{aligned}$$

$$\begin{aligned}
 V &:= \begin{bmatrix} \delta_p & -\delta_p & -\delta_p & \delta_p \\ \delta_q & -\delta_q & \delta_q & -\delta_q \\ \delta_r & \delta_r & -\delta_r & -\delta_r \\ \delta_p \delta_q \delta_r & \delta_p \delta_q \delta_r & \delta_p \delta_q \delta_r & \delta_p \delta_q \delta_r \end{bmatrix} \\
 V &:= \begin{bmatrix} \delta_p & -\delta_p & -\delta_p & \delta_p \\ \delta_q & -\delta_q & \delta_q & -\delta_q \\ \delta_r & \delta_r & -\delta_r & -\delta_r \\ \delta_p \delta_q \delta_r & \delta_p \delta_q \delta_r & \delta_p \delta_q \delta_r & \delta_p \delta_q \delta_r \end{bmatrix} \tag{2}
 \end{aligned}$$

$$\begin{aligned}
 a &:= \begin{bmatrix} a_1 \\ a_2 \\ a_3 \\ a_4 \end{bmatrix} \\
 a &:= \begin{bmatrix} a_1 \\ a_2 \\ a_3 \\ a_4 \end{bmatrix} \tag{3}
 \end{aligned}$$

$$T := \mathit{simplify} \left(V. \frac{((U \bullet a) \cdot \sim (U \bullet a))}{4 \cdot \delta_p \delta_q \delta_r} \right)$$

$$T := \begin{bmatrix} 2\Delta^2\left(\Delta^2a_2a_3\delta_p^2+a_1a_4\right) \\ 2\Delta^2\left(\Delta^2a_1a_3\delta_q^2+a_2a_4\right) \\ 2\Delta^2\left(\Delta^2a_1a_2\delta_r^2+a_3a_4\right) \\ \left(\left(a_2^2\delta_r^2+a_3^2\delta_q^2\right)\delta_p^2+a_1^2\delta_q^2\delta_r^2\right)\Delta^4+a_4^2 \end{bmatrix} \tag{4}$$