

$$\begin{array}{c|c|c} c & e_1 & 0 \\ \hline e_1 & c & e_2 \\ \hline 0 & e_2 & c \end{array} \in \mathfrak{t}_n^+$$

$$\begin{array}{c|c|c} x_1 & 0 & 0 \\ \hline y_1 & x_2 & 0 \\ \hline & y_2 & x_3 \end{array} \in \mathfrak{t}_n$$

$$\begin{array}{c|c|c} c & e_1 & 0 \\ \hline e_1 & c & e_2 \\ \hline 0 & e_2 & c \end{array} \rtimes \begin{array}{c|c|c} x_1 & 0 & 0 \\ \hline y_1 & x_2 & 0 \\ \hline & y_2 & x_3 \end{array} = \begin{array}{c|c|c} p_1 & q_1 & 0 \\ \hline & p_2 & q_2 \\ \hline & & p_3 \end{array}$$

$$q_1 = e_1 \frac{x_2}{x_1}: \quad q_2 = e_2 \frac{x_3}{x_2}$$

$$p_1 = c + e_1 \frac{y_1}{x_1}: \quad p_2 = c - e_1 \frac{y_1}{x_1} + e_2 \frac{y_2}{x_2}: \quad p_3 = c - e_2 \frac{y_2}{x_2}$$

$$p_1 + p_2 + p_3 = 3c$$

$$\begin{array}{c|c|c} cx_1 + e_1 y_1 & e_1 x_2 & 0 \\ \hline & cx_2 + e_2 y_2 & e_2 x_3 \\ \hline & & cx_3 \end{array} = \begin{array}{c|c|c} c & e_1 & 0 \\ \hline e_1 & c & e_2 \\ \hline 0 & e_2 & c \end{array} \begin{array}{c|c|c} x_1 & 0 & 0 \\ \hline y_1 & x_2 & 0 \\ \hline & y_2 & x_3 \end{array}$$

$$= \begin{array}{c|c|c} x_1 & 0 & 0 \\ \hline y_1 & x_2 & 0 \\ \hline & y_2 & x_3 \end{array} \begin{array}{c|c|c} p_1 & q_1 & 0 \\ \hline & p_2 & q_2 \\ \hline & & p_3 \end{array} = \begin{array}{c|c|c} x_1 p_1 & x_1 q_1 & 0 \\ \hline & y_1 q_1 + x_2 p_2 & x_2 q_2 \\ \hline & & y_2 q_2 + x_3 p_3 \end{array}$$

$$p_1 = c + e_1 \frac{y_1}{x_1}: \quad p_2 = c + e_2 \frac{y_2}{x_2} - y_1 \frac{q_1}{x_2} = c - e_1 \frac{y_1}{x_1} + e_2 \frac{y_2}{x_2}: \quad p_3 = c - y_2 \frac{q_2}{x_3} = c - e_2 \frac{y_2}{x_2}$$

$$q_i = e_i \frac{x_{i+}}{x_i}: \quad 1 \leq i < n$$

$$p_i = c + e_i \frac{y_i}{x_i} - e_{i-} \frac{y_{i-}}{x_{i-}}: \quad 1 < i < n$$

$$p_1 = c + e_1 \frac{y_1}{x_1}: \quad p_n = c - e_{n-} \frac{y_{n-}}{x_{n-}}$$

