

$$e \quad \begin{array}{cccccc} 1 & 2 & 3 & 4 & 5 & 6 \\ 1 & 2 & 3 & 4 & 5 & 6 \end{array}$$

$$a \quad \begin{array}{cccccc} 1 & 2 & 3 & 4 & 5 & 6 \\ 6 & 1 & 2 & 3 & 4 & 5 \end{array} \quad (123456)$$

$$a^2 \quad \begin{array}{cccccc} 1 & 2 & 3 & 4 & 5 & 6 \\ 5 & 6 & 1 & 2 & 3 & 4 \end{array} \quad (135)(246)$$

$$a^3 \quad \begin{array}{cccccc} 1 & 2 & 3 & 4 & 5 & 6 \\ 4 & 5 & 6 & 1 & 2 & 3 \end{array} \quad (14)(25)(36)$$

$$a^4 \quad \begin{array}{cccccc} 1 & 2 & 3 & 4 & 5 & 6 \\ \hline 5 & 6 & 1 & 2 & 3 & 4 \\ 3 & 4 & 5 & 6 & 1 & 2 \end{array} \quad \begin{array}{l} \cancel{(135)(246)} \\ (534)(642) \end{array}$$

$$a^5 \quad \begin{array}{cccccc} 1 & 2 & 3 & 4 & 5 & 6 \\ 2 & 3 & 4 & 5 & 6 & 1 \end{array} \quad (654321)$$