

$$1. \quad AB = \begin{pmatrix} 2 & 14 \\ 14 & 28 \end{pmatrix}, \quad ABC = \begin{pmatrix} 60 & 26 \\ 140 & 42 \end{pmatrix}$$

$$\text{则 } (ABC)^T = \begin{pmatrix} 60 & 140 \\ 26 & 42 \end{pmatrix}$$

$$2. \quad (AB)^T = B^T A^T$$

$$= \begin{pmatrix} 1 & 4 & 2 \\ 7 & 2 & 0 \\ -1 & 3 & 1 \end{pmatrix} \begin{pmatrix} 2 & 1 \\ 0 & 3 \\ -1 & 2 \end{pmatrix}$$

$$= \begin{pmatrix} 0 & 17 \\ 14 & 13 \\ -3 & 10 \end{pmatrix}$$