

$$W(A) = \frac{1}{2} \begin{pmatrix} \begin{pmatrix} a_1^1 + a_2^1 + a_1^2 + a_2^2 \\ a_1^1 - a_2^1 + a_1^2 - a_2^2 \end{pmatrix} \begin{pmatrix} a_1^1 + a_2^1 - a_1^2 - a_2^2 \\ a_1^1 - a_2^1 - a_1^2 + a_2^2 \end{pmatrix} \end{pmatrix}, \quad (1)$$