A complete set.

1 Gaußian integrals

Real

$$\int d\boldsymbol{v}\; e^{-\frac{1}{2}\boldsymbol{v}^T\boldsymbol{A}\boldsymbol{v}} \;=\; (2\pi)^{N/2}\;\det \boldsymbol{A}^{-1/2} \tag{1}$$

$$\int d\boldsymbol{v}\; e^{-\frac{1}{2}\boldsymbol{v}^T\boldsymbol{A}\boldsymbol{v}+\boldsymbol{j}^T\cdot\boldsymbol{v}} \;=\; (2\pi)^{N/2}\;\det \boldsymbol{A}^{-1/2}\; e^{\frac{1}{2}\boldsymbol{j}^T\boldsymbol{A}^{-1}\boldsymbol{j}} \tag{2}$$

$$\int d\boldsymbol{v}\; e^{-\frac{1}{2}\boldsymbol{v}^T\boldsymbol{A}\boldsymbol{v}}\,(\ldots) \;=\; (2\pi)^{N/2}\;\det \boldsymbol{A}^{-1/2} \sum_{\substack{\text{pairings of}\\ \{i_1,\ldots,i_{2n}\}}} A^{-1}_{i_{k_1} i_{k_2}} \ldots A^{-1}_{i_{k_1} i_{k_2}} \tag{3}$$