

1. 若 $\begin{vmatrix} a_{11} & a_{12} \\ a_{21} & a_{22} \end{vmatrix} = a$, 则 $\begin{vmatrix} a_{12} & ka_{22} \\ a_{11} & ka_{21} \end{vmatrix} = (\quad)$

- (A) ka (B) $-ka$ (C) k^2a (D) $-k^2a$

2. 行列式 $\begin{vmatrix} 1 & -1 & 1 & x-1 \\ 1 & -1 & x+1 & -1 \\ 1 & x-1 & 1 & -1 \\ x+1 & -1 & 1 & -1 \end{vmatrix} = \underline{\hspace{2cm}}$

3. 计算行列式

(1) $D_n = \begin{vmatrix} x_1^2+1 & x_1x_2 & \cdots & x_1x_n \\ x_1x_2 & x_2^2+1 & \cdots & x_2x_n \\ \vdots & \vdots & & \vdots \\ x_nx_1 & x_nx_2 & \cdots & x_n^2+1 \end{vmatrix}$

(2) $D_{2n} = \begin{vmatrix} a_n & & & & & b_n \\ & \ddots & & & & \\ & & a_1 & b_1 & & \\ & & c_1 & d_1 & & \\ & & & & \ddots & \\ c_n & \ddots & & & & d_n \end{vmatrix}$