

Page 3 Example:

$$D_2 = 2^2 \cdot \det \begin{pmatrix} 3 & -1 \\ -1 & 3 \end{pmatrix} = 4 \cdot 8 = 32 > 0,$$

$$D_2 = 2^3 \cdot 40 = 320 > 0.$$

Note that $\det(cA) = c^n \det(A)$ for an $n \times n$ matrix A .