

# ĐỀ KT LẦN 1 (DSTT)

17h00 → 17h55  
(N8p online)

Câu 1/ Tính

$$1/ \begin{vmatrix} 1 & 0 & -1 & -1 \\ 0 & -1 & -1 & 1 \\ a & b & c & d \\ -1 & -1 & 1 & 0 \end{vmatrix} \quad 2/ \begin{vmatrix} 1 & 1 & 1 \\ a & b & c \\ b+c & c+a & a+b \end{vmatrix}$$

Câu 2/

$$\text{CMR} \begin{vmatrix} 1 & 1 & 2 \\ 1 & 8 & 5 \\ 5 & 4 & 3 \end{vmatrix} : 23$$

Câu 3 Giải

$$1/ \begin{vmatrix} a & x & x & b \\ x & a & b & x \\ x & b & a & x \\ b & x & x & a \end{vmatrix} = 0 \quad 2/ \begin{vmatrix} 1 & x & x^2 & x^3 \\ 1 & 2 & 4 & 8 \\ 1 & 3 & 9 & 27 \\ 1 & 4 & 16 & 64 \end{vmatrix} = 0$$

Câu 4 (0,5đ) Tính

$$D_n = \begin{vmatrix} 7 & 4 & 0 & 0 & \dots & 0 & 0 & 0 \\ 3 & 7 & 4 & 0 & \dots & 0 & 0 & 0 \\ 0 & 3 & 7 & 4 & \dots & 0 & 0 & 0 \\ \vdots & \vdots & \vdots & \vdots & \dots & \vdots & \vdots & \vdots \\ 0 & 0 & 0 & 0 & \dots & 3 & 7 & 4 \\ 0 & 0 & 0 & 0 & \dots & 0 & 3 & 7 \end{vmatrix}$$