

## Άσκηση 2

$$\left. \begin{array}{l} 1.) \quad x = 1:8 \\ P_{q,r} = P_{2,4} \\ n = qr = 2 \cdot 4 = 8 \end{array} \right\} \begin{array}{l} \bullet P_{2,4} = I_8 \left( \begin{bmatrix} (1:4:8), (2:4:8), (3:4:8), \\ (4:4:8) \end{bmatrix}, : \right) \end{array}$$

$$\begin{aligned} \bullet \text{Άρα } P_{2,4} \cdot x &= I_8 \left( \begin{bmatrix} 1, 5, 2, 6, 3, 7, 4, 8 \end{bmatrix} \right) x = \\ &= \begin{bmatrix} x(1:4:8) \\ x(2:4:8) \\ x(3:4:8) \\ x(4:4:8) \end{bmatrix} \end{aligned}$$

$$2.) \quad \Sigma \omega \sigma \tau \omicron$$

$$3.) \quad A = \begin{pmatrix} 0 & B \\ B^T & 0 \end{pmatrix}, \quad B: \text{άνω} \\ \text{σιδιαζμένο}$$

$$\blacktriangleright \text{Νοιά η δομή του } T = P A P^T, \text{ όπου } P = P_{2,n} ?$$

Απ:  $\rightarrow$