

Facitliste til Lektion 6

1. (a)

$$U = \begin{bmatrix} 1 & 1 & 1 & 1 \\ 0 & 2 & 0.5 & 2 \\ 0 & 0 & 1.5 & 1 \\ 0 & 0 & 0 & 2 \end{bmatrix}$$

(b)

$$\begin{bmatrix} x_1 \\ x_2 \\ x_3 \end{bmatrix} = \begin{bmatrix} -0.104 \\ 0.507 \\ 1.139 \\ -0.542 \end{bmatrix}$$

2. (a)

$$U = \begin{bmatrix} 1.732 & -0.577 & -0.577 \\ 0 & 1.633 & -0.817 \\ 0 & 0 & 1.414 \end{bmatrix}$$

(b)

$$\begin{bmatrix} h_A \\ h_B \\ h_D \end{bmatrix} = \begin{bmatrix} 9.75 \\ 15 \\ 6.25 \end{bmatrix}$$

(c)

$$U_2 = \begin{bmatrix} 1.732 & -0.577 & -0.577 & 4.618 \\ 0 & 1.633 & -0.817 & 19.392 \\ 0 & 0 & 1.414 & 8.838 \\ 0 & 0 & 0 & 2.345 \end{bmatrix}$$

(d)

$$\varphi = 5.5$$