

Opgave 2 lektion 2

Foldnings summen er

$$y[n] = \sum_{k=-\infty}^{\infty} x[k]h[n-k] = \sum_{k=-\infty}^{\infty} h[k]x[n-k]$$

Så derfor

$$y[0] = \sum_{k=-\infty}^{\infty} h[k]x[0-k] = \dots 0 + 2 \cdot 1 + -3 \cdot 0 + 1 \cdot 0 + 0 + 0 \dots = 2$$

$$y[1] = \sum_{k=-\infty}^{\infty} h[k]x[1-k] = \dots 0 \cdot 0 + 2 \cdot 1 + -3 \cdot 1 + 1 \cdot 0 + 0 \cdot 0 + 0 \dots = -1$$

$$y[2] = \sum_{k=-\infty}^{\infty} h[k]x[2-k] = \dots 0 \cdot 0 + 2 \cdot 1 + -3 \cdot 1 + 1 \cdot 1 + 0 \cdot 0 + 0 \dots = 0$$

$$y[3] = \sum_{k=-\infty}^{\infty} h[k]x[3-k] = \dots 0 \cdot 0 + 2 \cdot 1 + -3 \cdot 1 + 1 \cdot 1 + 0 \cdot 0 + 0 \dots = 0$$