

Example

Example

The signal $x(t) = \sum_{n=-\infty}^{\infty} \text{rect}(t - 1/2 - 2n)$ is passed through a filter with frequency response $H(\omega) = 3 \text{rect}(\omega/\pi)$. Determine the output signal $y(t)$.

(Selected from Midterm Exam 2 of Summer 2014)

Frequency response (2)

Example

Find response $y(t)$ of a (real) LTI system to the sinusoidal signal $x(t) = \sin(\omega t + \phi)$.