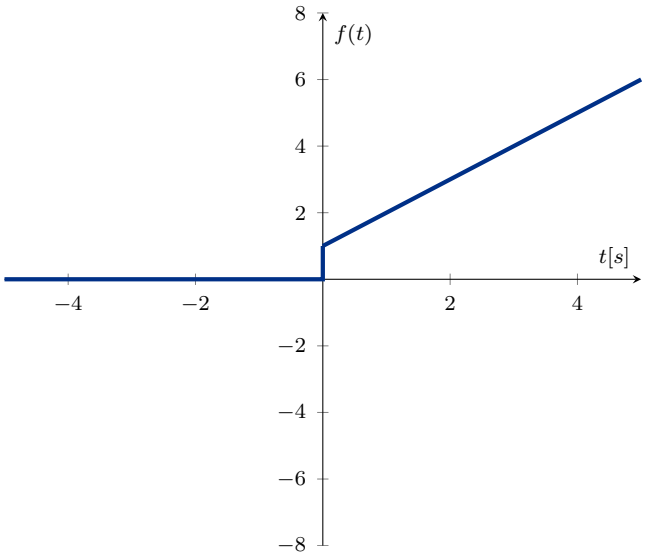
Opgave 1 - Løsningsforslag

Disclaimer: der kan være udeladelser og fejl i løsningsforslaget.

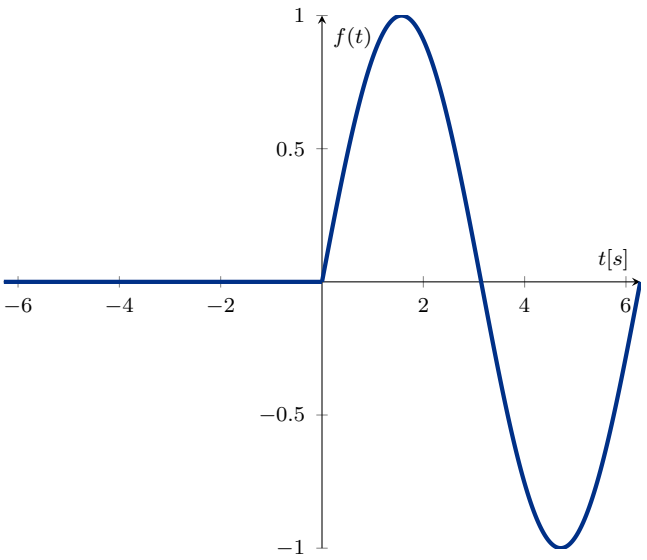
a) Tegn i intervallet $[-5; 5]$:

$$f(t) = (t+1)u(t) \tag{1.1}$$



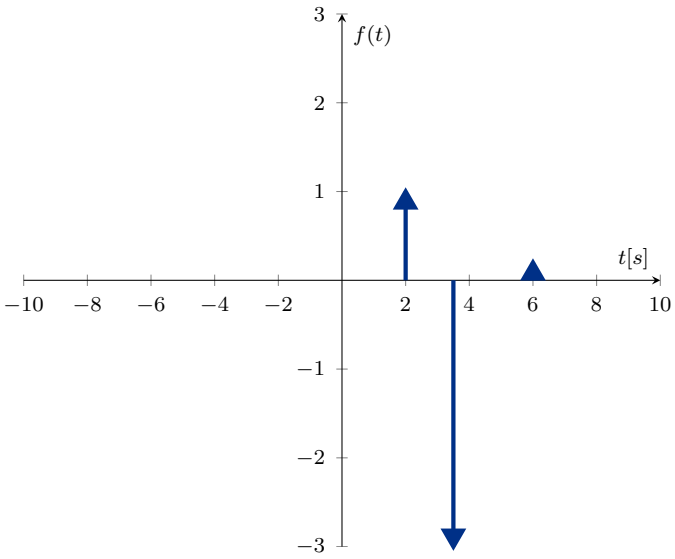
b) Tegn i intervallet $[-2\pi; 2\pi]$:

$$f(t) = \sin(t)u(t) \tag{1.2}$$



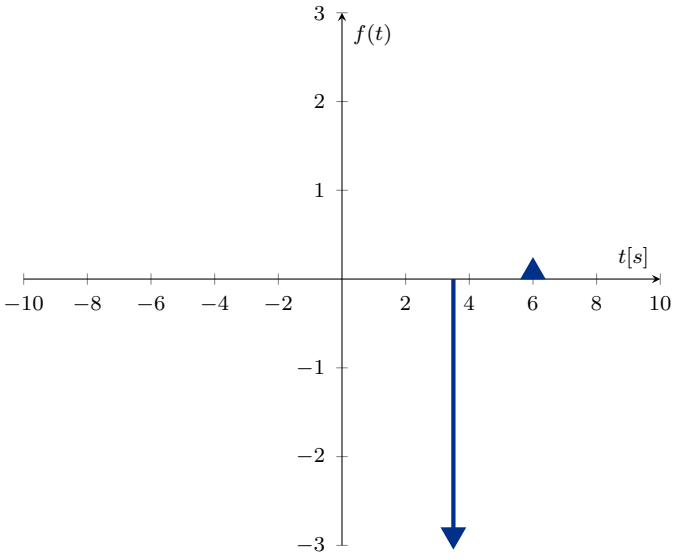
c) Tegn pulstoget

$$f(t) = \delta(t-2) - 3\delta(t-3,5) + 0,2\delta(t-6) \tag{1.3}$$



d) Tegn funktionen

$$f(t) = (\delta(t-2) - 3\delta(t-3,5) + 0,2\delta(t-6))u(t-3) \tag{1.4}$$



e) Opskriv funktions foreskriften for funktionen $f(t)$ på Figur 1.1.

Vi kan opskrive funktionen som

$$f(t) = 2\delta(t+1) + 5\delta(t-2) - \delta(t-7)$$

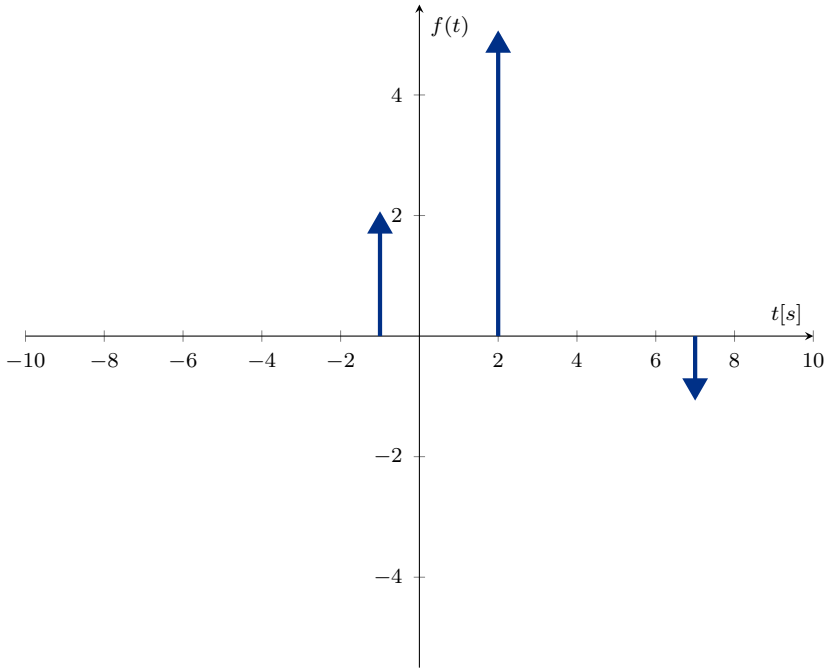


Figure 1.1: Plot af $f(t)$.