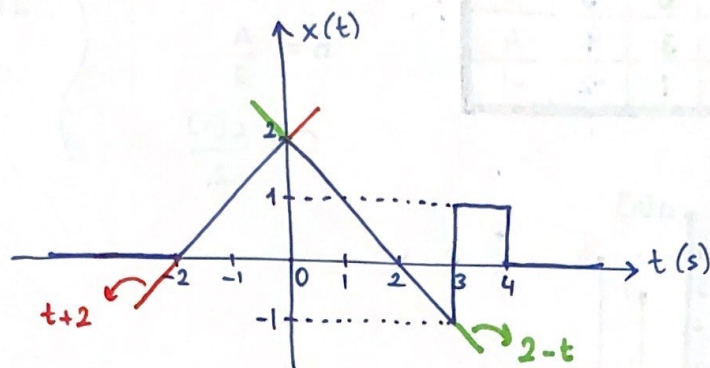# Quiz 1   Solution

A continuous time signal $x(t)$ is given in the figure below.

a) Express $x(t)$ in terms of unit step functions. (5 points)

b) Sketch $y(t) = 2x(2t+1)$ (5 points)

a) $x(t) = (t+2) \cdot [u(t+2) - u(t)] + (2-t) \cdot [u(t) - u(t-3)] + [u(t-3) - u(t-4)]$

$\qquad = (t+2) \cdot u(t+2) - 2 \cdot t \cdot u(t) + (t-1) \cdot u(t-3) - u(t-4)$

b)