30 May 2018

1. A graph of $y=f(t)$ is given below.

(a) 2 Express $f(t)$ using unit step functions.
(b) 2 Find the Laplace transform of $f(t)$.
2. 6 Find the inverse Laplace transform of

$$
F(s)=e^{-3(s+1)} \frac{s-2-s^{2}}{\left(s^{2}\right)(s-2)} .
$$

