Problem 12

In each of Problems 7 through 12:

(a) Sketch the graph of the given function.

(b) Express $f(t)$ in terms of the unit step function $u_c(t)$.

$$f(t) = \begin{cases} 
  t, & 0 \leq t < 2, \\
  2, & 2 \leq t < 5, \\
  7 - t, & 5 \leq t < 7, \\
  0, & t \geq 7. 
\end{cases}$$