

## Problem 9

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  $u_c(t)$ .

$$f(t) = \begin{cases} 1, & 0 \leq t < 2, \\ e^{-(t-2)}, & t \geq 2. \end{cases}$$