EECS20n, Quiz 1 Solution, 9/16/02

The quiz is to provide feedback to you and to me about how well you've followed the material so far. It is primarily testing your familiarity with the notation. The quiz will take 15 minutes. Write your reponse on the sheet.

Please print your name and lab time here:

Last Name ————————— First ————————— Lab time —————————

Please indicate whether the following statements are true or false. There will be no partial credit, so please consider your answer carefully.

1. For any set X, $X \subset P(X)$, where $P(X)$ denotes the power set of X.

   false

2. Consider a continuous-time function x where $\forall\, t \in Reals$, $x(t) = 2$. Then $x \in [Reals \to Reals]$.

   true

3. Let $x\colon Reals \to Reals$ and $y\colon Integers \to Reals$ be functions such that $\forall\, n \in Integers$, $y(n) = x(n)$. Then $graph(y) \subset graph(x)$.

   true

4. There is a function $f\colon \{1, 2\} \to \{a, b\}$ with $graph(f) = \{(1, a), (2, a)\}$.

   true

5. Given two functions $f\colon X \to Y$ and $g\colon X \to Y'$, if $Y \subset Y'$ then $graph(f) \subset graph(g)$.

   false