

**EENG307: Intro to Feedback Control**  
Fall 2020  
**Homework Assignment #2**  
**Quiz #3**

Quiz Question Monday: Find the Laplace Transform of the function  $x(t) = (1 - e^{-t})u(t)$ . Simplify to a ratio of polynomials in  $s$ .

- (a)  $X(s) = \frac{s+1}{1}$
- (b)  $X(s) = \frac{s}{(s+1)}$
- (c)  $X(s) = \frac{1}{s(s+1)}$
- (d)  $X(s) = \frac{s(s+1)}{1}$
- (e)  $X(s) = \frac{s+1}{s}$