Laplace Transform Quiz by Tarang Srivastava

- 1. Define the Laplace Transform for a function f(t)
- **2.** Find $\mathcal{L}\{1\}$
- 3. Find $\mathcal{L}\left\{e^{at}\right\}$
- **4.** Find $\mathcal{L}\{\sin at\}$
- 5. Show that the Laplace Transform is a linear operator
- **6.** Find $\mathcal{L}\{5e^{-2t} 3\sin 4t\}$
- 7. Define the Laplace Transform for a function f'(t)
- **8.** Find $\mathcal{L}\left\{\cos at\right\}$ using the property from the previous question
- **9.** Find $\mathcal{L}\left\{u_c(t)\right\}$
- **10.** Find $\mathcal{L}\{u_c(t)f(t-c)\}$