Operational Properties

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November 4, 2020

• If $\mathcal{L}{f(t)} = F(s)$ and a is any real number, then:

$$\mathcal{L}\lbrace e^{at}f(t)\rbrace = F(s-a) \tag{1}$$

• This theorem works both ways, as:

$$e^{at}f(t) = \mathcal{L}^{-1}\{F(s-a)\}\tag{2}$$