

2.1. Dik: $x(s) = \frac{1}{s}$ $G(s) = \frac{1}{s+1}$

$$Y(s) = x(s) \cdot G(s)$$

$$= \frac{1}{s} \cdot \frac{1}{s+1} = \frac{1}{s(s+1)}$$

$$y(t) = \int^{-1} Y(s) = 1 - e^{-t}$$

2.2. Dik: $x(z) = \frac{1}{s}$ $G(z) = \frac{1}{s+1}$

$$X(z) = Z \frac{1}{s} = \frac{z}{z-1}$$

$$G(z) = Z \frac{1}{s+1} = \frac{z}{z-0,3679}$$

$$Y(z) = X(z) \cdot G(z)$$

$$= \frac{z}{(z-1)} \cdot \frac{z}{(z-0,3679)} = \frac{z^2}{z^2 - 1,3679z + 0,3679}$$

$$\begin{array}{r} z^2 - 1,3679z + 0,3679 \overline{) z^2} \\ \underline{z^2 - 1,3679z + 0,3679} \\ 1,3679z - 0,3679 \\ \underline{1,3679z - 1,0711 + 0,5032z^{-1}} \\ 1,5032 - 0,5032z^{-1} \\ \underline{1,5032 - 2,0562z^{-1} + 0,5530z^{-2}} \\ 1,5530z^{-1} - 0,5530z^{-2} \\ \underline{1,5530z^{-1} - 1,7654z^{-2} + 0,5713z^{-3}} \\ 1,2124z^{-2} - 0,5713z^{-3} \\ \underline{1,2124z^{-2} - 1,6584z^{-3} + 0,4460z^{-4}} \\ 1,0871z^{-3} - 0,4460z^{-4} \end{array}$$

garis putus-putus menandakan bahwa terjadi pencuplikan semu

artinya ???
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