國立中山大學 97 學年度第 2 學期資訊工程學系資工數學

Quiz #5 2009/04/22

1. Use the time delay property of the Laplace transform $\mathcal{I}\{f(k-n)\}=z^{-n}F(z)$

$$f(k) = 4$$
, $k = 2,3,4,...$ (25%)

2. Use the time advance property to find the z-transform of the causal sequence $\{f(k)\}=\{4,8,16,\ldots\}$ (25%)

3. Find the z-transform of the sampled ramp sequence f(k) = k, k = 0,1,2,...(25%)

4. Find the z-transform of the exponential sequence $f(k) = e^{-\alpha kT}$, k = 0,1,2,... (25%)