MA-102

Assignment – Laplace Transform

1. Find the Laplace Transform of following functions:
2. Find inverse Laplace transform of following functions:
3. Solve the differential equations using Laplace Transform:
4. (Convolution Theorem): Let and denote the Laplace transform of functions and respectively. Then, the product is the Laplace Transform of the convolution of functions and , defined by
   1. Prove above theorem.
   2. Show that

**Practice Problems:** Please see Erwin Kreyszig, Advanced Engineering Mathematics for further practice problems.