

ECE 340 Probabilistic Methods in Engineering, Spring 2013
Matlab Supplement to Assignment 9

Show that if X is a uniformly-distributed r.v. in $[0, 1]$, then the new r.v. Z , defined by

$$Z = -\mu \log(1 - X),$$

is an exponentially-distributed r.v. with parameter μ .

Describe how you can use Matlab and the function ‘rand’ to generate samples of an exponentially distributed rv with mean 5.