Assignment Set 7
Due May 9th

7.1 Probability Distribution Functions: Use a random number generator (ran1.c) and plot the distribution functions below for $N=100$, $1000$, $10000$ along with the analytical expressions:

1. $f(y) = 1 \quad (0 < y < 1)$
2. $f(y) = exp(-y) \quad (y > 0)$
3. $f(y) = 30/(7 \times y^2) \quad (3 < y < 10)$
Format Requirements for Assignments

For every code you write – no matter how small – as a class assignment:

• Include a multiple-line comment at the top with the following information:
  – The name of the assignment
  – Your name
  – The date you turned in the code

• Insert comments throughout the code: just before every main code element, like a function, a conditional statement, a loop, a set of variable assignments, or print statements etc.

• Turn in a print-out of the code along with print-outs of all possible program outputs both in data and graph form, whenever applicable. Also turn in your answers asked as part of the assignments.

• E-mail me all the source-code files. In the subject line remember to include (i) your name, (ii) the name or number of the exercise.