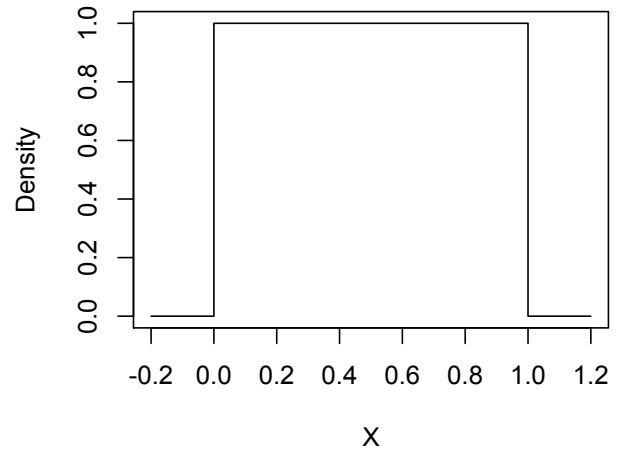


Psyc 3101, Homework 3

Name: \_\_\_\_\_ TA: \_\_\_\_\_ Lab Day and Time: \_\_\_\_\_

Please fill out all three lines above. Otherwise we can't easily record your scores.

This density plot shows a Uniform distribution.  
All scores between 0 and 1 are equally likely.



1. What proportion of scores are greater than .8?
  2. What proportion of scores are less than .3?
  3. What proportion of scores are between .45 and .65?
4. Draw a histogram of a skewed distribution.

Write the measurement scale of each variable

5. Time it takes people to walk to school
6. People eat 5 cookies and rank them from favorite to least favorite.
7. You measure people's height using a ruler on a wall, and later you learn the ruler was too high (so that 0 was above the floor), but you don't know by how much.
8. Create a distribution that has  $\text{mean} > \text{median} > \text{mode}$ , and write the value of each of these statistics. If you need a starting point, begin with {1, 2, 3, 3, 4, 5}, which has  $\text{mean} = \text{median} = \text{mode}$ , and think of ways to change this by adding more scores.
9. Calculate the variance of the population {51, 56, 54, 57, 47}.
10. A population of 100 people has a standard deviation of 2. What's the sum of squares?