

# Week 17 - Probability

## *Calculating Pi*

MENGM0032  
Manufacturing Systems

You have been given a set of 10,000 Real random numbers between 0 and 1. Assuming that the distribution of the random numbers is uniform

1. Calculate  $\pi$ .
2. How accurate is your calculation?
3. How many random numbers would it take for you to get  $\pi$  right to four digits after the decimal point?