

STAT 345 - Handout 6
BASED ON SECTIONS: 7.4 – 7.5
Sampling Distributions

Instructions:

- Roll the die 25 times in a row. Record the results in the first column of the table below (marked Run 1).
- Compute the mean and standard deviation of the 25 rolls, round to one decimal place, and record in the table.
- Repeat for Run 2, Run 3 and Run 4.
- When you have done all four, write the values you got for the mean on the board.
- Let the random variable X be the result of rolling one die. What is the distribution of X ? What is the mean, μ , and standard deviation, σ , of X ? How do your results compare?
- Make a histogram or stem-and-leaf plot of one of your runs.

	Run 1	Run 2	Run 3	Run 4
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
Mean				
St. Dev.				