## TI-84: Generating Random Numbers

1. Be sure you "seed" your calculator. This will ensure that the same random numbers do not appear on everyone's calculator. Enter a random number in the calculator such as the student ID number or telephone number. Then press [STO->] [MATH] "PRB" "1:rand".

Note: This step only needs to be completed once unless you reset the calculator! Â And you will not get the same numbers!

2. Specify the minimum and maximum integers possible, and how many random integers to generate. For example, [MATH] "PRB" "5:randInt(1,10,5)" [ENTER] generates 5 numbers between 1 and 10.

Note: Hit [Enter] to get 5 more random numbers between 1 and 10. Of course, you will not likely get the same random numbers.
randint(1, 10,5)
$\left.\begin{array}{llll}5 & 10 & 5 & 6 \\ \hline\end{array}\right)$
randint( $1,10,5$ )
$\left[\begin{array}{llll}3 & 1 & 8 & 5\end{array}\right)$
3. To simulate flipping a coin, let ' 0 ' be heads and ' 1 ' be tails. For example, [MATH] "PRB" "5:randInt( $0,1,6$ )" [ENTER] generates 6 numbers between 0 and 1. All of the ' 0 's are Heads. All of the ' 1 's are Tails!

The image below shows 3 heads and 3 tails. Then it shows 4 heads and 2 tails.

4. To simulate rolling dice, go to [MATH] "PRB" "5:randInt(1,6,2)" [ENTER] generates 2 numbers between 1 and 6.

The image below shows rolling a die three times and the results.

| T1-84 Plus Silver Edition <br> ti Texas Instruments <br> randInt( $1,6,2) 5$ randInt ( $1,6,2$ ) randInt ( $1,6,6$ ) <br> 13 |
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5. You could also generate a lot of numbers and store them in a list. For example, [MATH] "PRB" "5:randInt(1,10,100" [ENTER] generates 100 numbers between 1 and 10. Then [STO->] [2nd] 'L1' will place the numbers in List 1.

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| Ans ${ }^{\text {a }}$ L |
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