

Simulating Probability Experiments with a Graphics Calculator

- *. a. If you have a graphics calculator, you can **simulate** throwing a coin 50 times, using the commands below. The number 0 represents a Tail, while the number 1 represents a Head. The results are stored in List 1. Do this now.

TI: randInt(1, 2, 50) → L1

Casio: xxxx

- b. Do a count of the number of Heads, as follows:

TI: sum(L1)

Casio: xxxx

Record this number.

- c. Repeat the above two steps until you have recorded 20 numbers.
 d. Make a stemplot of your 20 answers.
 e. The class will collate these results in the next lesson.

- *. a. Use your graphics calculator to simulate tossing a die 60 times. Store the output in List 1. (Hint: modify the command in Q6, part *a.*)

- b. The following command can be used to count the number of 1s in List 1:

TI: sum(L1 = 1)

Casio: xxxx

The number of 1s is called its **frequency**.

Use this command to help you copy and complete the table:

Outcome	1	2	3	4	5	6
Frequency						

- c. Which is the hardest number to get? Justify your answer.

Challenge

- *. I have a special coin, where the chance of throwing Heads is greater than the chance of throwing Tails. This coin is said to be **biased**. With this coin, on average Heads comes up 60% of the time, and Tails comes up 40% of the time.

Figure out a way to simulate this biased coin on your graphics calculator.