



## Tech Tip: Experimenting with a Random Number Generator

You can use a graphing calculator to simulate experimental probability.

Follow the instructions to check out several different applications.

### Using a TI-83+ Graphing Calculator

1. Press **MATH**. Scroll right so that PRB is highlighted.
2. Press **5** to select **5:randInt(**.  
This command tells the calculator to generate random integers.

```
randInt(
```

3. a) To simulate flipping coins, enter **1,2**.  
Make sure there are no spaces between the characters.

```
randInt(1,2)
1
```

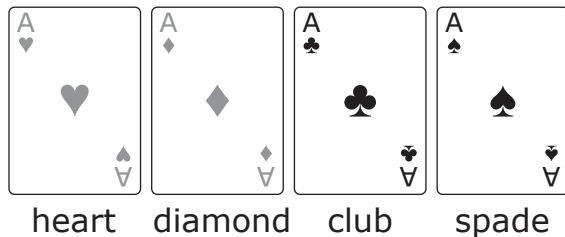


This tells the calculator to select either the number 1 or the number 2.

Mentally assign heads or tails to each number. For example, 1 is heads, 2 is tails.

Continue pressing the **ENTER** key to generate more random tosses.

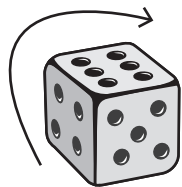
- b)** To simulate selecting the suit of a card, enter **1,4**).  
Make sure there are no spaces between the characters.



```
randInt(1,2) 1
randInt(1,4) 4
```

This tells the calculator to select an integer from 1 to 4. Mentally assign 1 suit to each of the 4 numbers. Continue pressing the **ENTER** key to generate more random suits.

- c)** To simulate selecting the value of a card, enter **1,\_\_\_** ).  
**d)** To simulate selecting the exact card, enter **1,\_\_\_** ).  
**e)** To simulate rolling 1 die, enter **1,\_\_\_** ).



- 4.** Press **ENTER**. A random integer from the acceptable range of values will be displayed. Continue pressing **ENTER** to generate more random numbers.