# Probability Simulation

*Quick reference sheet*

**Probability Simulation**
Version 1.1
© 2001 Corey Taylor
Rusty Wagner
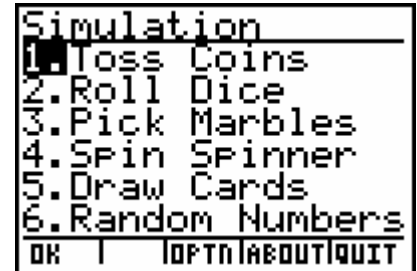PRESS ANY KEY

**To Start:** `APPS` choose **Prob Sim**. `ENTER`

To control the options seen at the bottom of the windows, use the "graphing" buttons immediately below the window.

**Choose** from the six options. (The OPTN option at the bottom of the window will allow you to reseed the random number generator.)

Simulation
1.Toss Coins
2.Roll Dice
3.Pick Marbles
4.Spin Spinner
5.Draw Cards
6.Random Numbers
OK | |OPTN|ABOUT|QUIT

## Toss Coins Settings:

To control settings, select **SET** at the bottom of the window.

**Trial Set –** set to 1 by default (one trial will occur for TOSS)

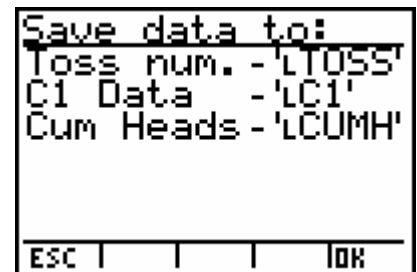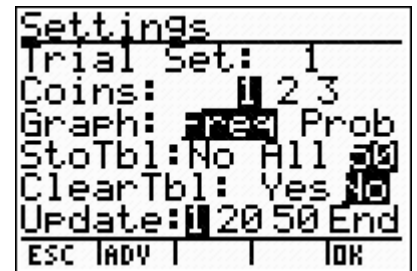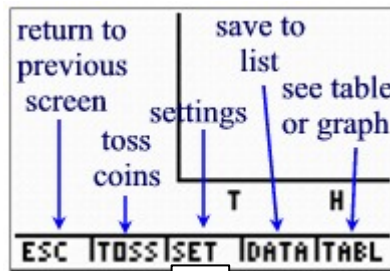**Coins** – defaults to 1 (# of coins flipped)

**Graph** – set to Freq displays the number heads that occurred. Set to Prob displays the relative ratio that has occurred for that coin.

**StoTbl** – defaults to All (when set to No, only the graph can be viewed and no table data can be seen. The only other option is 50.)

**ClearTabl** – is set automatically when other settings are chosen

**Update** - defaults to 1 (how many trials occur before the graph is updated)

**The ADV option** at the bottom of the setting screen will allow you to change weights to simulate unfair situations.

Data collection can be saved to lists.

return to previous screen
toss coins
settings
save to list
see table or graph
ESC |TOSS|SET |DATA|TABL
T    H

Settings
Trial Set: 1
Coins: 1 2 3
Graph: Freq Prob
StoTbl:No All 50
ClearTbl: Yes No
Update:1 20 50 End
ESC |ADV | | |OK

Save data to:
Toss num. -'LTOSS'
C1 Data -'LC1'
Cum Heads -'LCUMH'
ESC | | | |OK

## Roll Dice/Pick Marbles/Spin Spinner

The remaining choices have basically the same "settings" as the Coin Toss.

**Roll Dice:** Sides – the number of sides the die will have.

**Pick Marbles:** Type – the number of lettered marbles.

**Spin Spinner:** Sections – sections on spinner (between 2 and 8)

## Draw Cards

Settings:

**Decks** – defaults to 1 (can be 1 to 3)

**Replace** – yes = card replaced (R appears); no = card is removed from deck

**Deck Size** – default to 52 (or can be European deck of 32).

## Random Numbers

Settings:

**Number:** how many random numbers are drawn (from 1 to 6)

**Range:** the range of the numbers to be chosen (0 to 99)

**Replace:** If YES, numbers are replaced and can be chosen again.

**When finished**, ESC to the simulation choice screen, choose QUIT at the bottom right of window.