

Math 107

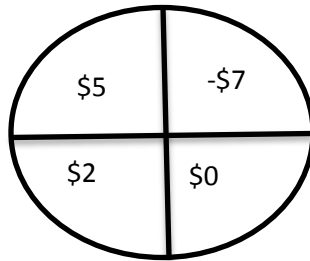
Probability Activity– Spinner Fun! – WORK IN GROUPS

In class we will discuss how to create your own spinner!!!. Now you get to create some spinner games

Game #1:

- a) Create the spinner pictured below
- b) Calculate the Expected value of this game. Show your work!
- c) Write a sentence explaining the meaning of the value in b (do not just write that it is in your favor or not) Also tell me if you should play this game or not
- d) Play the game 20 times – give me your data and results – estimate the expected value based on this data!

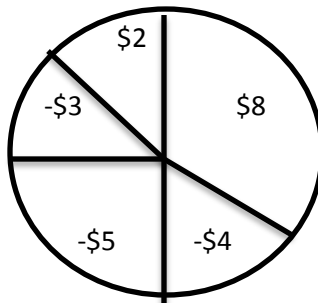
Note: Assume each section has the same area



Game #2:

- a) Create the spinner pictured below
- b) Calculate the Expected value of this game. Show your work!
- c) Write a sentence explaining the meaning of the value in b (do not just write that it is in your favor or not) Also tell me if you should play this game or not
- d) Play the game 20 times – give me your data and results – estimate the expected value based on this data!

Note: The \$8 section is 120 degree slice, the -\$4 section is a 60 degree slice, the \$2 and -\$3 are each 45 degree slices and the -\$5 section is a 90 degree slice



Game #3: Now you need to make your own spinner!!!

Create a spinner with the following properties

- a) It has five sections – each worth a different amount
- b) The probability of landing on each section is different!
- c) The expected value is \$4

Create the spinner – yes you will turn it in and yes I will measure!

Write a paragraph explaining how you created the spinner and show in detail how you know the expected value is \$4. Also include a sentence explaining the meaning of the expected value