

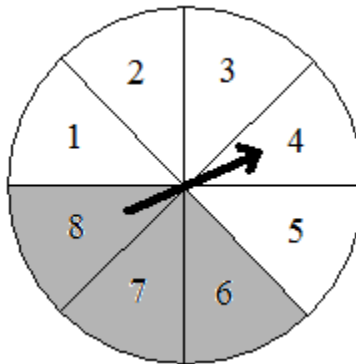
Name: \_\_\_\_\_

Math 130

Date: 2/13/2025

Quiz 4

1. (1, 1, 1, 1, 1, 3, 1, 1 points) Consider the experiment where you spin the spinner shown below:



Let  $A$  denote the event that the spinner lands on an odd number, let  $B$  be the event that the spinner lands on a shaded part of the circle, and let  $C$  be the event that the spinner lands on a number less than 7.

a) Find  $A \cup B$

b) Find  $B \cap C$

c) Find  $\overline{B}$

d) Are the events  $A$  and  $B$  disjoint? Why or why not?

(this is a continuation of problem 1)

e) Find the probability that the spinner lands on a number less than 7 (write your answer as a percentage)

f) What does the probability in part (e) mean?

g) If you spin the spinner 20,000 times, how many times will the spinner land on a number less than 7?

h) If you spin the spinner infinitely many times, what percentage of the time will the spinner land on a number less than 7?