

Name_____

Math 304
Practice Quiz 1 – Sections 9.1 – 9.4

Show your work for full credit.

1. All the digits 0 – 9 are each placed on separate slips of paper and one is randomly selected from that collection.

- a. What is the probability that an odd number is selected from that collection?

1.a. _____

- b. What are the odds in favor of selecting a number greater than 7?

b. _____

2. A student claims that “if the probability of an event is $\frac{1}{2}$ then there is one way the event can occur and only two elements in the sample space.” How do you respond?

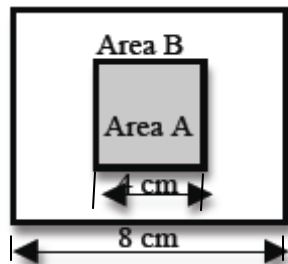
3. Suppose the playoffs for a sporting event require the teams to play until one team wins 2 games.

- a. What is the maximum number of games that could be played if no ties are allowed?

a. _____

- b. Explain how a simulation could be created for this situation.

4. Consider the following square mat. If a lawn dart is tossed and it hits the mat, what is the probability that it lands in the gray region which is also a square?



4. _____

5. A jar contains 5 blue, 8 red, and 6 green marbles.

- a. What is the probability that a marble drawn at random is blue or green?

5.a. _____

- b. On back draw a tree diagram for two marbles selected without replacement to find the probability that the two marbles are of different color.

b. _____