

# Math 112 - Quiz 10

May 2, 2019

Name \_\_\_\_\_

Score \_\_\_\_\_

Show all work to receive full credit. Supply explanations when necessary.

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1. (3 points) Consider the experiment of rolling an 8-sided die.
  - (a) What is a sample space for this experiment?
  - (b) Give an example of an event (associated with this experiment). Describe it in words.
  - (c) Determine the theoretical probability of the event you described above.
2. (4 points) A letter is selected at random from the word *sleeveless*.
  - (a) What is the sample space?
  - (b) What is the event of selecting a consonant?
  - (c) What is the probability of selecting the letter *s* or *e*?
3. (1 point) Suppose  $A$  is an event with  $P(A) = 0.635$ . Determine  $P(A')$ .
4. (2 points) Decide whether the probability is theoretical (classical) or experimental (empirical).
  - (a) Isabella grabbed 14 Skittles candies from a jar, and 6 of them were red. Her probability of selecting a red candy is  $6/14$ .
  - (b) In flipping two coins, the probability of them both landing heads up is 25%.