

Math 112 - Quiz 15

November 28, 2018

Name key Score _____

Show all work to receive full credit. Supply explanations when necessary. This quiz is worth 5 points. YOU MUST WORK INDIVIDUALLY.

1. (3 points) A letter is selected at random from the word *zenzizenzizenzic*.

(a) What is the sample space?

$$\{z, e, n, i, c\}$$

(b) What is the event of selecting a vowel?

$$\{e, i\}$$

(c) What is the probability of selecting the letter *z* or *n*?

$$\frac{9}{16}$$

2. (1 point) Suppose *A* is an event with $P(A) = 0.635$. Determine $P(A')$.

$$P(A') = 1 - 0.635 = 0.0365$$

3. (1 point) Decide whether the probability is theoretical (classical) or experimental (empirical).

(a) While at the casino, Seth won 10 hands of blackjack after playing 15 games. His probability of winning is $10/15$.

EXPERIMENTAL

(b) In a single birth, the probability of having a girl is 50%.

THEORETICAL