

Math 112 - Quiz 1

January 24, 2018

Name _____

Score _____

Show all work to receive full credit. Supply explanations when necessary. YOU MUST WORK INDIVIDUALLY.

1. (2 points) Let A be the set of all real numbers greater than 9. Is A well defined? Briefly explain.
2. (1 point) List one number that is an element of the set \mathbb{N} and one number that is not an element of \mathbb{N} . Say which is which.
3. (2 points) Let L be the set of letters in the word *tattletale*. Write L in roster notation and then determine $n(L)$.
4. (2 points) Circle each set that is equal to $\{a, b, c\}$.
 $\{a, b, c\}$ $\{b, c, a\}$ $\{a, a, b, b, c, c\}$ $\{a, b, c, d\}$ $\{a, b\}$
5. (2 points) Write this sentence in words: $13 \in \{1, 3, 5, 7, 9, \dots\}$. Is the sentence true or false?
6. (1 point) Let $M = \{x \mid 5x + 3 = 23\}$. Which notation has been used to describe the set M : verbal, roster, or set-builder? Rewrite M in roster notation.