

Math 112 - Quiz 4

September 4, 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. (2 points) List all subsets of $\{r, s, t\}$.

$\emptyset, \{r\}, \{s\}, \{t\};$
 $\{r, s\}, \{r, t\}, \{s, t\},$
 $\{r, s, t\}$

2. (1 point) What is the only subset of $\{r, s, t\}$ that is not proper?

$\{r, s, t\}$

3. (1.5 points) State whether each is true or false.

(a) $\{3\} \subseteq \{1, 3, 5\}$

True

(b) $\{1, 2, 3\} \subseteq \{123\}$

False

(c) $\emptyset \subseteq \{ \}$

True

4. (0.5 point) Without listing them, state how many subsets $\{x, y\}$ has.

↑ 2 ELEMENTS

⇒ $2^2 = 4$ SUBSETS