Math 200 - Quiz 4

Name _____

September 26, 2012

Score _____

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

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1. (2 points) Suppose U is the set of all Prairie State College students, A is the set of all Math 200 students, and B is the set of all English 101 students. Describe, in words, an element of each of these sets.

    (a) $\overline{A}$

    (b) $A \cap B$

    (c) $A \cup \overline{B}$

    (d) $\overline{A \cup B}$

2. (1 point) Referring to the problem above, what would it mean if $B \subseteq A$?

3. (1 point) List all subsets of $\{a, b, c\}$.

4. (1 point) Let $P = \{1, 2, 3, 4, 5\}$. Give an example of a set Q such that $Q \subseteq P$, $n(Q) = 3$, and $\emptyset \subseteq Q$.