QUIZ 1 (MATH 61, SPRING 2015)

Your Name: _____

UCLA id: _____

Math 61 Section: _____

Date: _____

The rules:
This is a multiple choice quiz. You must circle exactly one answer with an ink pen.
If two or more answers are circled, the answer is not accepted.
You are allowed to use only this paper and pen/pencil. No calculators.
No books, no notebooks, no web access. You MUST write your name.

Points: (10 per correct answer)

_____

Let $U = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$, $A = \{1, 2, 3, 4, 5\}$, $B = \{3, 5, 7, 9\}$, $C = \{3, 4, 5, 8\}$.

Question 1. The size $|\overline{B}|$ is equal to:

3 4 5 6 7

Question 2. The size $|A \cup C|$ is equal to:

4 5 6 7 8

Question 3. The size $|B \cap C|$ is equal to:

1 2 3 4 5

Question 4. We proved in class the existence of a proper 2-coloring of regions on the plane separated by lines using:

induction contradiction case by case analysis meditation

Question 5. Let $f : \mathbb{N} \to \mathbb{N}$ is given by $f(n) = n^2$. Then f is a

surjection injection bijection

here $\mathbb{N} = \{0, 1, 2, 3, \ldots\}$ You must circle all that apply!