QUIZ 1   (MATH 61, SPRING 2017)

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 and UCLA id in ink

Points: (10 per correct answer)

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

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

$$3 \qquad 4 \qquad 5 \qquad 6 \qquad 7$$

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

$$1 \qquad 2 \qquad 3 \qquad 4 \qquad 5$$

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

$$5 \qquad 7 \qquad 8 \qquad 9 \qquad 10$$

Question 4. In modular arithmetic, $18 - 2 \mod 3$ is equal to

$$1 \qquad 2 \qquad 3 \qquad 18 \qquad 600$$

Question 5. We proved in class that regions in the plane separated by lines can be properly colored with how many colors:

$$1 \qquad 2 \qquad 3 \qquad 4 \qquad 5$$