QUIZ 4 - MATH 102   Friday, October 2

YOUR NAME:_____   George Voutsadakis

Read each problem **very carefully** before starting to solve it. Each problem is worth 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. Graph the compound inequality in **two variables**

$$1 - x < y \quad \text{and} \quad x > y + 5.$$

   Your graph should be **large** and **clear** and **all points must be labeled**.

2. George, your teacher, is giving you the following puzzle: He is thinking of two numbers.

- The sum of the first number plus twice the second number is 50.
- Subtracting twice the first number from the second gives a difference of 10.

George is asking you to find the two "mystery" numbers by following closely the steps below:

(a) Introduce variables and **clearly** explain what they stand for.

(b) Write two equations that reflect the two itemized statements above.

(c) Solve the equations using the **addition method** to find the "mystery" numbers.