QUIZ 3 - MATH 102 Friday, September 17

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. Nick plans to fence a rectangular area for his rabbits alongside his house. He will use 14 feet of fencing to fence only three sides of the rectangle. If the side running parallel to the house is 2 feet longer than either of the other two sides, what are the dimensions of the rectangular area?

2. Chicago during prohibition: In an Al Capone underground moonshine lab, his associates are trying to figure out how many gallons of a weak whisky with 30% alcohol content they have to mix with an everclear solution containing 90% alcohol to produce 50 gallons of a 40% alcoholic beverage. Can you use your skills to help them out?