QUIZ 6 - MATH 112 Friday, October 25

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. Suppose that George starts from point A biking north and Chris also starts from point A driving east. George is biking at 20 mph whereas Chris is driving at 60 mph. At what rate does the distance between George and Chris increase when George is 5 miles from point A and Chris is 12 miles from point A?

2. Find an equation for the tangent line to the graph of $x^3 + 9xy^2 + 3y = 43$ at the point $(1, 2)$.