PRACTICE EXAM 1 - MATH 111

DUE DATE: Friday, January 30

INSTRUCTOR: George Voutsadakis

Read each problem very carefully before starting to solve it. Each question is worth 3 points. It is necessary to show your work. Correct answers without explanations are worth 0 points.

GOOD LUCK!!

- 1. Find the equation of the line that is parallel to the line passing through (2, -7) and (-3, 3) and goes through the point (4, -6).
- 2. Find the intercepts and then graph the equation 2x + 3y + 12 = 0.
- 3. Use the quadratic formula to obtain the solutions of $8x^2 10x + 3 = 0$.
- 4. A small company that produces tires has found that its operating cost in dollars is C = 20x + 2500 and its revenue in dollars is R = 40x, where x is the number of tires produced and the cost and revenue is in dollars. How many tires have to be produced to break even? What is the break-even revenue?
- 5. Solve the inequality and then graph the solution of |6 2x| + 5 > 19.
- 6. Solve the inequality and graph the solutions of $\frac{x+7}{x-3} \leq 0$.