EXAM 2 - MATH 102 YOUR NAME:_____

Read each problem **very carefully** before starting to solve it. Each problem is worth 10 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. Use the method of substitution to solve the 2×2 system

$$\left\{\begin{array}{rrrr} x - 5y &=& 4\\ 4x + 8y &=& -5 \end{array}\right\}$$

2. Use elimination to solve the 3×3 system

3. Simplify the expression $\left(\frac{ab^{-6}}{a^7b^4}\right)^3$ and write your answer using only positive exponents.

4. Solve the equation $x^3 - 2x^2 - x + 2 = 0$.

5. Solve the equation $|x^2 - x - 21| = 9$.