Math 1031   **Diagnostic Test**   **September 13, 2000.**
Professor Peter A. Rejto.

1. (35 pts.) If Mary ate $\frac{3}{8} - th$ of a pizza and Mathew ate $\frac{2}{5} - th$ of a pizza, then how much of the pizza is left? Please give the exact answer as a fraction and note that most calculators give a decimal number which is only close to the exact fraction.

2. (35 pts.) Reduce to lowest terms,
$$\frac{x^3 + 5x^2}{x^2 + x}.$$

3. (30 pts.) Find,
$$\frac{2x}{x - 3} + \frac{5}{3 - x}.$$
   In other words, write this sum under a common denominator.