Precalculus Unit 10 – 10.3 Homework Worksheet
Multivariable Linear Systems (Partial Fraction Decomposition)

1. Write the partial fraction decomposition for the rational expression.

$$\frac{x - 2}{x^2 + 4x + 3}$$

2. Write the partial fraction decomposition for the rational expression.

$$\frac{x^2 + 12x - 9}{x^3 - 9x}$$

3. Write the partial fraction decomposition for the rational expression.

$$\frac{x^2 - x + 2}{x(x - 1)^2}$$

4. Write the partial fraction decomposition for the rational expression.

$$\frac{x^3 + 2x^2 - x + 1}{x^2 + 3x - 4}$$