

Due Tuesday, September 12th at the beginning of class. Please use additional paper as necessary to submit CLEAR and COMPLETE solutions.

Use the partial fraction decomposition to integrate these rational functions.

1. $\int \frac{x^2 - x + 5}{x^2 + x - 6} dx$

2. $\int \frac{y^2 + 3}{y^3 - 3y^2 + 3y - 1} dy$

3. $\int \frac{-z^3 - 26z^2 - 28z - 120}{z^4 - 16} dz$

4. $\int \frac{dw}{w^2 - 2w + 10}$