

## Math 232 Worksheet - Partial Fractions

Evaluate the integral.

$$(1) \int \frac{1}{x^2 + 4x + 4} dx \quad (2) \int \frac{1}{x^2 + 4x + 5} dx \quad (3) \int \frac{x^2 + 1}{x + 1} dx \quad (4) \int \frac{1}{x^2 - 1} dx$$

$$(5) \int \frac{1}{x^3 - x} dx \quad (6) \int \frac{1}{x^3 - x^2} dx \quad (7) \int \frac{x + 3}{x^2 + 4x + 8} dx \quad (8) \int \frac{1}{x^3 + 2x^2 + 2x} dx$$