

Maple Take Home Exam

Problem 1

$$f := x \rightarrow \frac{x^3 + 2 \cdot x^2 - x - 2}{x^3 + x^2 - 4 \cdot x - 4};$$

Define f(x).

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

convert(f(x), parfrac);

Compute the partial fraction decomposition of f(x) by converting the function into a partial fraction.

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