

# Rubi 3 Test Suite Results

## Rational Function Indefinite Integration Problems

Unable to integrate:

$$\left\{ \frac{-3 + 10x + 4x^3 - 30x^5}{(3 + x + x^4)^3} - \frac{3(1 + 4x^3)(2 - 3x + 5x^2 + x^4 - 5x^6)}{(3 + x + x^4)^4}, x, -13, 13 \right\}$$

$$\frac{2 - 3x + 5x^2 + x^4 - 5x^6}{(3 + x + x^4)^3}$$

$$\frac{7}{2(3 + x + x^4)^3} - \frac{63x}{22(3 + x + x^4)^3} - \frac{12x^2}{(3 + x + x^4)^3} - \frac{5x^3}{(3 + x + x^4)^3} +$$

$$\frac{3x^4}{2(3 + x + x^4)^3} - \frac{10x^6}{(3 + x + x^4)^3} - \frac{1}{2(3 + x + x^4)^2} + \frac{5x^2}{(3 + x + x^4)^2} + \frac{144}{11} \operatorname{Int}\left[\frac{1}{(3 + x + x^4)^4}, x\right] +$$

$$\frac{828}{11} \operatorname{Int}\left[\frac{x}{(3 + x + x^4)^4}, x\right] + 18 \operatorname{Int}\left[\frac{x^2}{(3 + x + x^4)^4}, x\right] - 4 \operatorname{Int}\left[\frac{1}{(3 + x + x^4)^3}, x\right] - 20 \operatorname{Int}\left[\frac{x}{(3 + x + x^4)^3}, x\right]$$