

## Supplementary Homework Exercises for Section 8.5: Rational Functions (part 2)

### Exercises

Integrate.

$$\text{S1. } \int \frac{x}{x^3 - x^2 - x + 1} dx$$

$$\text{S2. } \int \frac{2x^2 - x + 4}{x^3 + 4x} dx$$

$$\text{S3. } \int \frac{1}{x^2(1 + x^2)} dx^*$$

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\*This is identical to Exercise 8.3.9, but you should attempt the problem using partial fractions.