
MATH 213 - Tutorial 1: Review of Key Integration Methods

1. Evaluate

$$\int \frac{x+2}{x^2(x+1)} dx$$

2. Evaluate

$$\int \frac{1}{(x^2+1)(x+1)} dx$$

For more practice of using partial fractions to evaluate integrals see Paul's Online notes

3. Evaluate

$$\int x^4 e^x dx$$

Pro-tip: Use the tabular method for integration by parts to save some time.

4. Evaluate

$$\int e^x \sin(x) dx$$

For more practice of using integration by parts to evaluate integrals see Paul's Online notes