

Ryerson University
Lab 2 - MTH 240 - Winter 2014- Week Jan 20-24

1. Problem 11 Section 7.3 Evaluate the integral $\int \sqrt{1 - 4x^2} dx$
2. Problem 19 section 7.3 Evaluate the integral $\int \frac{\sqrt{1 + x^2}}{x} dx$
3. Problem 6 Section 7.4 Write out the form of the partial fraction decomposition of the function. Do not determine the numerical values of the coefficients.
 - a) $\frac{t^6 + 1}{t^6 + t^3}$
 - b) $\frac{x^5 + 1}{(x^2 - x)(x^4 + 2x^2 + 1)}$
4. Problem 15 Section 7.4 Evaluate the integral $\int_3^4 \frac{x^3 - 2x^2 - 4}{x^3 - 2x^2} dx$
5. Problem 25 Section 7.4 Evaluate the integral $\int \frac{4x}{x^3 + x^2 + x + 1} dx$

Quiz 2: The quiz will cover Sections 7.3 & 7.4