

Review Problems

February 10, 2017

1. (Fall 2002, Exam 2, #2) Evaluate $\int_0^2 \frac{x}{\sqrt{x^2 + 4}} dx$
2. (Fall 2004, Exam 1, #10) Use an appropriate trigonometric substitution to evaluate $\int_4^5 \frac{9}{x^2 \sqrt{x^2 - 9}} dx$
3. (Fall 2007, Exam 2, #3) $\int_1^{\sqrt{3}} \frac{dx}{(x^2 + 1)^{3/2}} =$
4. (Fall 2009, Exam 2, #2) Compute $\int_2^4 \frac{dx}{\sqrt{x^2 - 4}}$.