

Homework 7

Due: 12-10-13

Use substitution (in addition to the other properties of integrals) to evaluate the following indefinite and definite integrals:

1. $\int (x^2 - \cos(3x)) dx$

2. $\int \sqrt{t} (t^{3/2} + 5)^3 dt$

3. $\int \sqrt{x} e^{x\sqrt{x}} dx$

4. $\int_1^4 \frac{e^{-\sqrt{x}}}{\sqrt{x}} dx$

5. $\int_0^{\pi/6} \tan(2x) dx$