

Spring 2018-2019
Math 342
Applied Mathematics

May 17

Evaluate the given expressions and solve the given equation.

1. $\int_0^{\infty} x^6 e^{-2x} dx$

2. $\int_0^{\infty} \sqrt{y} e^{-y^3} dy$

3. $\int_0^1 \sqrt{\frac{1-x}{x}} dx$

4. $\int_0^1 \frac{1}{\sqrt{-\ln x}} dx$

5. $\int_0^x (x-t)^{1/4} y(t) dt = x + x^2$