

## Homework 14

1. Section 7.3: Problems 1, 15, 21, 37, 45, 47, 53, 57.
2. Section 7.4: Problems 3, 5, 7, 8, 9, 10, 23(a), 24.
3. Section 8.2: Problems 5, 11, 15, 23, 25, 27, 29, 33, 35, 43, 45, 51, 63, 71, 75, 76.

Hints:

$\int e^{ax} \cos(bx) dx$  or  $\int e^{ax} \sin(bx) dx$  : integration by part twice.

Computations involving antiderivative of  $\tan^2 x$ : try  $\tan^2 x = \sec^2 x - 1$

$\int f(x) \ln x dx$ : try  $y = \ln x$ ,  $x = e^y$  and proceed.