

Homework 5

1. Problems finding volume of solids:

- Section 6.3: 17, 19, 21, 29, 31
- Section 6.4: 5, 7, 9, 17, 25

Answer keys are in the back of the textbook.

2. Compute the following integrals using integration by parts *several times*:

- (a) $\int e^{-x} \cos x dx$ with $u = \cos x$ and $dv = e^{-x} dx$.
- (b) $\int x^2 e^x dx$ with $u = x^2$ and $dv = e^x dx$.