

# Homework 10

Math 262

due at classtime on Tuesday, December 6

Write your solutions to the following problems clearly and neatly. Make sure to explain your reasoning and provide mathematical details that support your answers. For a few tips on writing solutions, see [this helpful guide for mathematical writing](#).

You may write or type your solutions electronically, or write them on paper and scan or photograph them. Upload a single file containing your solutions to the [Homework 10](#) assignment on Moodle.

## Book Problems

- Section 4.2 #30, 31, 39 (pages 262–264)
- Section 4.3 #43(ab), 57, 59, 60, 62, 64 (pages 272–277)  
*Hint:* In #59(a), don't forget how to complete the square. Also recall that  $\int_{-\infty}^{\infty} e^{-u^2} du = \sqrt{\pi}$ .
- Section 4.4 #73, 76, 79 (pages 286–289)