

**Math 54**  
**Exam 4, v6, Answers**  
**Spring 2018**

- Problem 1.**  $H_0 : \mu = 5$ .
- Problem 2.**  $H_1 : \mu < 5$ .
- Problem 3.** -1.684.
- Problem 4.** -0.985.
- Problem 5.** Fail to reject.
- Problem 6.**  $H_0 : p = 0.75$ .
- Problem 7.**  $H_1 : p > 0.75$ .
- Problem 8.** 1.645.
- Problem 9.** 2.309.
- Problem 10.** Reject.
- Problem 11.** 0.0408.
- Problem 12.** 2.4163.
- Problem 13.** 0.05.
- Problem 14.** 1.2656.
- Problem 15.**  $H_0 : \sigma = 1.0$ .
- Problem 16.**  $H_1 : \sigma < 1.0$
- Problem 17.** 13.848.
- Problem 18.** 11.760.
- Problem 19.** Reject.
- Problem 20.** No.