Math 138: Statistics Quiz #5 Topics

Chapters 25–28 and selecting techniques of inference.

• Chapter 25: Paired *t*-intervals and tests. Determining which samples are independent and which are paired. Writing, interpreting, and understanding statements about paired *t*-intervals and paired *t*-tests. Making conclusions based on software output.

Chapter 25: 5 (Women), 7 (Friday the 13th, traffic)

• Chapter 26: Chi-square tests. Choosing between goodness-of-fit, independence, and homogeneity tests. Writing, interpreting, and understanding statements about chi-square tests. Making conclusions based on software output.

Chapter 26: 1 (Which test?), 3 (Dice), 13 (Childbirth, part 1), 15 (Childbirth, part 2), 17 (Childbirth, part 3)

• Chapter 27: Regression inference. Writing, interpreting, and understanding statements about confidence intervals and hypothesis tests for slope, predicted individuals, and predicted means. Making conclusions based on software output.

Chapter 27: 3 (Movie budgets), 5 (Movie budgets: the sequel), 17 (Fuel economy), 19 (Fuel economy, part II), 21 (Fuel economy, part III)

• Chapter 28: ANOVA tests. Writing, interpreting, and understanding statements about ANOVA tests. Making conclusions based on software output.

Chapter 28: 3 (Gas mileage), 5 (Activating baking yeast), 19 (Cereals)

• Selecting techniques of inference. Choosing which inference technique is appropriate for a given example.

Practice problems: Class activity from Monday 12/5, and determining which statistical inference technique and graphical displays to use for any of the problems in Chapter 2: 7–26.