Mth256/656 Textbook Problems: Statistics: McClave and Sincich

Chpt 1: Intro to Stats:

11th ed: 1 thru 9, 14-16, do Applets 1.1 and 1.2

Chpt 2: Descriptive Stats:

11th ed: s1 qual: 1, 5, 7; s2 quant/hist: 22, 25; s3 summation: 42; s4 center: 46, 59, 51; s5 variab: 69, 71, 73, 76a

s6 interpret sd: 90, 95, 102; s7 percentile: 107; s8 outlier, iqr, boxplot: 118, 120, 124, 125, 135; s9: graph biv: 142, 148, 166, 172

chpt 3: Probability

11th ed: s1 events, space: 1, 15, 16 (read only), App 3.1, App 3.2, 22, 30, 32; s2 thru 4: unions, intersection, addition rule: 33, 34, 35, 41, 48;

s5 and 6: condit prob, tree diag: 63, 67, 73, 81, 89; s7 random sampl: 94, 99a-c; 104; SKIP s8: for s9 Bayes: 133, 135; ssupl: 156, 192, 196

chpt 4: Discrete Random Variables

11th ed: s1 and 2 intro rv: 4, 7, 8, 13, 30, app 4.1; s3 ev and sd of rv: 32, 33, 42, 44; s4 binomial: 48, 52, 6, 67; s5 poisson 73, 83; s6 hypergeo: 92, 93, 94, 95, 100; ssuppl: 116, 123;

chpt 5 Continuous Random variables

11th ed: s1 and 2: intro and uniform: 1, 3, 5, 9, 15, 16, 17, app 5.1, app 5.2; s3 normal: 19, 20, 21,24, 30 App 5.3; s4 and 5 ck normal and approx: 51, 55, 57, 58abc, 70, 71;

s6 expon: 89, 94, 100;

chpt 6 Sampling istributions

11th ed: s1: concepts: 1, 2, 3, 4 excel read only, 5; s2: properties: 13, 14; s3 sample avg and clt: 22, 23, 35, 37; supp: 46, 48, 63, 69

chpt 7 Inference single sample: conf interval

11th ed: s1 and s2: large sample ci for M: 3, 4, 5, 6, 10, 13, 16, 23, app 7.1, 72.; s3: sample sample ci for M: 25, 26, 29, 36; s4 large ci for p: 44, 45, 57; s5 sample size; 62, 63, 71, 80;

chpt 8 Inference single sample: test of hypothesis

11th ed: s1: intro: 1 thru 7, 8, 15, 17 app 8.1; s2 large sample test for M: 18, 19, 22, 26, 35, app 8.3; s3 pvalues: 36, 39, 47; s4 small sample test for M: 59, 65; s5: large test for p: 73, 74, 76;

skip sec 8.6; s7: test for variance: 104, 112, 126; supp: 132, 136, 138, 150, 151;

chpt 9: Inference for 2 populations: ci and hyp.

11th ed: s1 and 2: targets and 2 indpt samples M: 1, 5, 7, 9, 26; s3: paried diffs: 30, 31, 32, 33, 35, 47; s4 2 indpt samples p: 50, 51, 53, 65; s5 sample size: 77, 78; s6:

2 popl variances: 86, 87, 90, 91, 100; suppl: 107, 107, 113

chpt 11: simple linear regression

11th ed: s1 prob models: 1 thru 4, 9, 10; s2 least squares: 11, 13, 14, 15, app 11.1; s3 model assumptions: 32, 33, 38, 39, 41; s4: ci and tests on slope: 47, 48, 49, 50, 52, 61;

s5: correlation: 55, 67, 68, 69, 72a,app 11.2; s6 estimation/pred: 87, 88, 89, 90, 91, 97

chpt 12: multiple regr and model bldg

11th ed: s1,2,3: 1st order, slope, overall: 1 thru 6, 14; s4: R squred: 28, 29, 32; s5: interactions: 41, 44, 47; s6: quad and higher order: 50 51, 52, 54;s7: qual (dummy): 67, 68,69, 70;

s8 qual and quant: 83, 84,85; s9: nested: 97, 98, 99, 100; skip sec 10 stepwise: s11 and 12117, 118, 119, 120, 121 thru 125.

chpt 14 on diskette: s1: sign test: 1, 2, 6, 8; indpt ranks: 16, 17, 18, 19, 20, 28; spearman's corr: 76, 77, 78, 81