STAT230 - McClave *et al.*, - Answers - Chapters 5 and 6

Note that these are bare answers. What you present as homework must have problem statements or otherwise be self-contained and must have explanations.

There is a reward for finding misprints in these solutions.

5.60

a. 90%

b. 0.05

c. 260

5.68

a. 1083

b. Wider

c. $z_{\alpha/2} = 0.5, P(0 \leq z \leq 0.5) = 0.195, \alpha = 0.617$

6.28

b. $z = 1.52$

c. No. $n > 30$

6.42 $p = 0.000$

6.44

a. $p = 0.0197$

b. $p = 0.0985$

c. $p = 0.379$

e. $s = 3.56$

6.56 a. $t = -1.79$

6.58

a. The rejection region is $t > 1.328$.

b. $H_0 : p = 0.02$ $H_a : p > 0.02$

c. $z = 14.23$, $z > 1.645$

d. Reject H_0

6.86

a. 17.2750

b. 15.5073

c. 11.1433

7.52

a. The test statistic is $z = 5.82$; the rejection region is $z > 1.645$ There is sufficient evidence to indicate that the population of managers consists of more males than the part-time.

c. The test statistic is $z = 7.14$; the rejection region is $z > 2.33$. Full-time more married than part-time.

7.66

a. $n_1 = n_2 = 911$

b. $n_1 = n_2 = 1692$