

STA2034—Spring 2013
Packet A
Practice Problem
ANSWER KEY

For video solutions to these problems, visit www.teachingcenter.ufl.edu/vsi

Problem	Answer	✓ or ✗	Concept
1a	1/2		
1b	1/9		
1c	1/6		
1d	1/18		
1e	0		
1f	1/6		
1g	1/2		
2a	0.5		
2b	0.5		
2c	0.0122		
2d	0		
2e	0.32		
3a	Reject at 0.1 but not at 0.01		
3b	0.05		
3c	18 \pm 1.645*3.061/6 = (17.1607, 18.8393). This interval does not contain 19 therefore it supports our conclusion that the mean value is less than 19		
4	$y = -67.6907 + 0.6646X_i$, SSE=779.55, df G=1, df E=18, df Total=19, MSG=935.45, MSE=43.31, $F^* = 21.6$ $F(.95, 1, 18) = 4.41$. Reject Ho.		
5	Ho: $\mu_1 = \mu_2 = \mu_3$ Ha: at least 1 mean is different Y-bar1=4.4 Y-bar2=4.2 Y- bar3=6.4 S1=.6733		

	<p> $S_2=.9522$ $S_3=.9522$ $SSG=14.8$ $SSE=27.2$ $DfG=2$ $DfE=12$ $SSTO=32$ $F(.95,2,12)=3.88,$ $F^*=3.265$ Fail to reject </p>		
6	<p> $p\text{-hat}=.55$, the z-score is $.635$ and the p-value is 0.2643 So we fail to reject H_0. The CI is $.55\pm$ $1.96(.07866)=(0.3958, .$ $7041)$. Since $.5$ is in this range, it supports our failing to reject. </p>		
7	<p> $\bar{x}=8.4$, $t=2.886$. Since $t^*>t(16)=2.120$ we reject at $.05$ alpha level. And the p- value is in the range $.005$ and $.01$. The corresponding CI is $(7.371, 9.428)$ </p>		

Are You Prepared?

Ask yourself:

- Which concepts do I clearly understand?

- On which concepts do I need more work?

- Where are there gaps in my background knowledge?

- Where can I get assistance?
 - Text: _____
 - Instructor office hours times/location:

 - Tutoring, Reviews, Study Groups: Broward Hall Teaching Center
 - Video resources: www.teachingcenter.ufl.edu/vsi

- What must I do to master this material? When?

- What do I need to review first?