Work with tables

1. Sample sizes are 36 and 45. Confidence level is 99%. t^* is

a) 2.704

b) 2.750

c) 1.697

d) 1.684

2. For confidence level 95%, z^* is

a) 2.704

b) 1.645

c) 1.960

d) 2.576

Work with tables

3. You test *H0: $\mu=12$* vs. *HA: $\mu<12$.* Sample size is 47. Suppose the value of test statistic *t is* -2.425. P-value is

a) $0.01<p<0.02$

b) $0.005<p<0.01$

c) $p=0.01$

d) $p=0.005$

4. You test *H0: $\mu=2$* vs. *HA: $\mu>2$.* Sample size is 56. Suppose the value of test statistic *t is* 1.578. P-value is

a) $0.05<p<0.10$

b) $0.10<p<0.20$

c) $p=0.10$

d) $p=0.05$

Work with tables

5. You test *H0: $\mu=8$* vs. *HA: $\mu\neq 8$.* Sample size is 34. Suppose the value of test statistic *t is* -0.489. P-value is

a) $p>0.25$

b) $0.20<p<0.25$

c) $p<0.25$

d) $p>0.50$

6. You test *H0: $p=43$* vs. *HA: $p>43$.* Suppose the value of test statistic *z is* 2.653. P-value is

a) $0.0025<p<0.005$

b) $0.005<p<0.01$

c) $p=0.10$

d) $p=0.005$

Work with tables

7. You test *H0: p=30* vs. *HA: p<30.* Suppose the value of test statistic *z is* -2.326. P-value is

a) p=0.02

b) 0.01<p<0.02

c) p=0.0099

d) p=0.099

8. You test *H0: p=10* vs. *HA: p≠10.* Suppose the value of test statistic *z is* -1.73. P-value is

a) 0.0418

b) 0.0836

c) 0.9582

d) 1.9164

Work with tables

A researcher wanted to see if there was a relationship between education attainment level and whether someone smokes or does not smoke. She classified education attainment into five categories: did not graduate from high school, high school graduate, some college, college graduate, or graduate degree, and then performed a chi-square test on the data.

9. What were the degrees of freedom?

a) (5)(2)=10

b) (4)(2)=8

c) (4)(1)=4

d) cannot be determined without the data

10. Suppose the chi-square value for the test was 12.96. What is the p-value?

a) $0.01 < p < 0.02$

b) $0.02 < p < 0.01$

c) 0.02

d) $0.025 < p < 0.005$

Would you feel comfortable using the one-sample t-procedures to analyze each of these data?

```
0 | 0 0 1 2 2 3 8
1 | 0
2 | 1
3 |
4 |
5 | 1
6 |
7 | 0
```

```
–1 | 4322
–0 | 975
–0 | 4322222111
 0 | 0012222233344
 0 | 6677889
 1 | 4
 1 | 7
```

```
–1 | 3
–0 | 4
 0 | 47
 1 | 12
 2 | 0023
```