

1. To construct a 95% confidence interval estimate for the difference between two population proportions, the confidence level would be

A) 1.96
B) 0.95
C) 0.475
D) 0.05

ANSWER: B

2. The z - value needed to construct 97.8% confidence interval estimate for the difference between two population proportions is

A) 2.29
B) 2.02
C) 1.96
D) 1.65

ANSWER: A

3. Independent samples of math scores from students in the U.S. and Europe were collected from normal populations. A sample of 50 students from the U.S. had an average score of 570 while a sample of 50 European students had an average score of 540. Assume the population standard deviations for the US and Europe are 102 and 115, respectively. What is the 95% confidence interval for the difference between population means?

A) 30 ± 35.65
B) 30 ± 21.73
C) 30 ± 42.61
D) 30 ± 64.23

ANSWER: C

4. The z value needed to construct 92.5% confidence interval estimate for the difference between two population proportions is

A) 2.58
B) 2.33
C) 1.96
D) 1.78

ANSWER: D

5. Which distribution is used in developing a confidence interval for the difference between the proportions of two populations using information from two large-samples?

A) The normal distribution
B) The Student's t -distribution
C) The exponential distribution

D) All of the above distributions can be used.

ANSWER: A

6. In constructing a 95% confidence interval estimate for the difference between the means of two normally distributed populations, where the unknown population variances are assumed not to be equal, summary statistics computed from two independent samples are as follows: $n_1 = 50$, $\bar{x}_1 = 175$, $s_1 = 18.5$, $n_2 = 42$, $\bar{x}_2 = 158$, and $s_2 = 32.4$. The upper confidence limit is:

A) 19.123

B) 28.212

C) 24.911

D) 5.788

ANSWER: B