Math 5090

9/14/2016

Suppose you have a random sample of size 4 from each of two populations that are N(0, σ12) and N(0, σ22). Assume that these random samples are independent from one another. If the outcome of the sample variances are 2 and 3 respectively, find an 80% equal tailed confidence interval for σ12/σ22. You may use the standard notation for percentiles in your answer.

Write an appropriate probability statement.

Rewrite the statement to isolate σ12/σ22.

Write the random interval.

Write the outcome of the random interval (i.e. confidence interval).