Week 7 Wednesday

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Make sure you know your neighbors' names. Then discuss:

About a week ago, you read some arguments in favor of retiring the idea of statistical significance. What is statistical significance, and what reasons do you remember being given in support of this position?

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Chi-square distribution, p-values for 1 categorical variable

1. pchisq(-, df) takes observations in a chi-square distribution with df degrees of freedom to percentiles, and qchisq(-, df) goes the other way. The black curve below is a chi-square distribution with 5 degrees of freedom. Which of the following would you use to calculate the observation which is less than exactly 16% of all observations?



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2. You want to evaluate whether players of

"rock-paper-scisors" choose between these three options randomly, or if certain options are favored above others. You ask two friends to play rock-paper-scissors and count the times each option is played. The following table summarizes the data:

Rock	Paper	Scissors
43	21	35

Use these data to evaluate whether players choose between these three options randomly, or if certain options are favored above others.

3. Which of the following is true about a chi-squared distribution?

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(A) It is left skewed.

(B) It is right skewed.

(C) It is symmetric.

4. How does the mean of a chi-squared distribution change as the degrees of freedom increases?

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(A) The mean stays the same.

(B) The mean decreases.

(C) The mean increases.

(D) None of the above.