**Using StatCrunch: Chi-Squared Scores**

**Example:** Suppose we are creating a confidence interval of a standard deviation with a confidence level of 90% \((\alpha = 0.05)\) and \(df = 30\)

Find the critical values needed from the Chi-squared distribution: \(\chi^2_L\) and \(\chi^2_R\)

1. Click **Stat–Calculators–Chi-Squared**
2. Enter the degrees of freedom in DF box

**Note:** \(\chi^2_L\) is the **left** critical value (so make sure the **red tail is on the left**: “\(\leq\)”) \n\(\chi^2_R\) is the **right** critical value (so make sure the **red tail is on the right**: “\(\geq\)”) 

\(\chi^2_L\) Enter “\(\leq\)” in the left box (left tail), enter 0.05 in the right box, hit enter. The answer appears in the middle box

\(\chi^2_R\) Enter “\(\geq\)” in the left box (right tail), enter 0.05 in the right box, hit enter. The answer appears in the middle box

\[\chi^2_L = 10.850811\]  
\[\chi^2_R = 31.410433\]