28. Chi-square test for goodness of fit on the calculator

You can use the TI-Nspire to perform the calculations for a chi-square test for goodness of fit. We'll use the data from the hockey and birthdays example to illustrate the steps.

1. Enter the observed counts and expected counts in two separate columns in a *Lists & Spreadsheet* page. Name the columns **observed** and **expected**.

Birthday	Observed	Expected
Jan-Mar	32	20
Apr-June	20	20
July-Aug	16	20
Sept-Dec	12	20

2. Perform a chi-square test for goodness of fit.

- Press (menu) → *Statistics* → *Stat Tests* → χ^2 *GOF*.
- A dialogue box will appear. Enter the values as shown in the box below. (tab) to OK and press (enter).
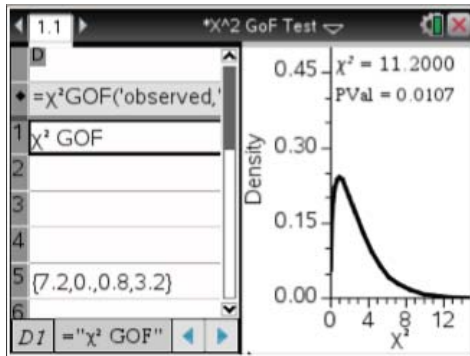
If you leave the *Shade P value* box unchecked, you'll get the test results within the spreadsheet containing the test statistic, *P*-value, and df. If you check the *Shade P value* box, you'll get a picture of the appropriate chi-square distribution with the test statistic marked and shaded area corresponding to the *P*-value.

We'll discuss the *Comp List* results later.