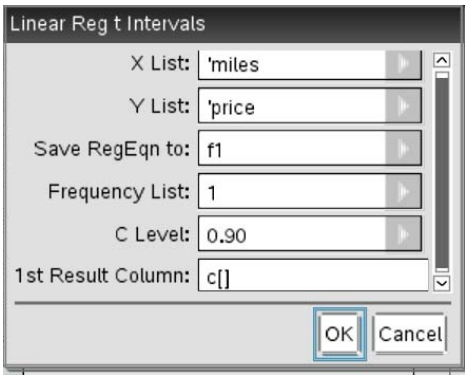
30. Confidence interval for slope on the calculator

Let's use the data from the Ford F-150 truck example on page 779 to construct a confidence interval for the slope of a population (true) regression line on the TI-Nspire. Here are the data:

Miles driven	70,583	129,484	29,932	29,953	24,495	75,678	8359	4447
Price (in dollars)	21,994	9500	29,875	41,995	41,995	28,986	31,891	37,991
Miles driven	34,077	58,023	44,447	68,474	144,162	140,776	29,397	131,385
Price (in dollars)	34,995	29,988	22,896	33,961	16,883	20,897	27,495	13,997

1. Insert a *Lists & Spreadsheet* page, and name column A **miles** and column B **price**. Type the corresponding values into each column.
2. To construct a confidence interval:
   - Press (menu) → *Statistics* → *Confidence Intervals* → *Linear Reg t Intervals*
   - In the first dialogue, select *Slope*. (tab) to [OK] and press (enter).
   - In the next dialogue box, select **miles** for the *X List* and **price** for the *Y List*. Enter the rest of the values as shown. (tab) to [OK] and press (enter).



	A miles	B price	C	D
=				=LinRegtI
1	70583	21994	Title	Linear R...
2	129484	9500	RegEqn	a+b*x
3	29932	29875	CLower	-0.2293...
4	29953	41995	CUpper	-0.0965...
5	24495	41995	b	-0.1629...
6	75678	28986	ME	0.066395
7	8359	31891	df	14.
8	4447	37991	s	5740.13
9	34077	34995	SESlope...	0.030956
10	58023	29988	a	38257.1
11	44447	22896	r^2	0.664248
12	68474	33961	r	-0.8150...
13	144162	16883	Resid	{-4763.8...
14	140776	20897		
15	29397	27495		

