

## Chapter 14 / Example 8

# Confidence intervals

The sample below is taken from a population which can be modelled by a normal distribution. Find a 95% confidence interval for the population mean.

34.3	29.5	38.1	27.5	29.2	37.0
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Open a new document and add a Lists & Spreadsheet page.

Type 'x' in the first cell.

Type the values in the first column.

Press **enter** or **▼** after each number to move to the next cell.

**Note:** 'x' is a label that will be used to calculate the p-value. You can use any letter or name to label the list.

	A	B	C	D
	x			
1	34.3			
2	29.5			
3	38.1			
4	27.5			
5	29.2			

To find the 95% confidence interval press **menu** 4:Statistics | 3:Confidence Intervals | 2:t interval...

Choose Input Method: Data

Press **enter**.

Choose List: x

Frequency List: 1

C Level: 0.95

Press **enter**.

The 95% confidence interval is (27.91, 37.29).

	A	B	C	D
	x		=tInterval(	
1	34.3	Title	t Interval...	
2	29.5	CLower	27.9143	
3	38.1	CUpper	37.2857	
4	27.5	$\bar{x}$	32.6	
5	29.2	ME	4.6857	