

Do you know when your data is lying to you?

The Hands-On-Workshop of Regression Analysis with Quantitative and Qualitative Variables

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<https://github.com/campnmug/rent> ← Paper, slide deck, data, code

Code in Red is all you must type to participate.

```
Data Y;  
  input Y @@;  
  datalines;  
  12.35  13.71  16.00  17.94  20.76  21.11  24.63  
  27.56  32.88  35.16  39.26  44.28  47.27  51.55;  
run;  
title 'The correct mean of y is 28.890 and the Std Dev is 12.9719';  
proc means data=y mean std maxdec=4;  
  run;  
  title;
```

```
Data trdata;  
  /* Problem is to explain the trend in variable Y.*/  
  /* H0: An intervention that begins in T=8 has no effect on the trend line.*/  
  /* H1: An intervention at T=8 changes the trend line.*/  
  /* Alternative problem: */  
  /* The actual equation is simply nonlinear in variables such as y = T TSQ.*/  
  
  set Y;  
  T=_N_;          /* 1. create time variable. */  
  TSQ = T*T;      /* 2. and time-squared value. */  
  D=0; if T>=8 then D=1; /* 3. Create binary variable for the intervention. */  
  DT = D*T;      /* 4. create interaction of D and T. */  
run;
```

```
ods graphics on / noborder width=5in;  
%let xref = %str( xaxis values=(1 to 14 by 1);  
                  refline 7.5 / axis=x label="<-- Policy change"  
                  labelloc=inside labelpos=min );;
```