

Correlation Coefficient

Display diagnostic values (r , r^2 , R^2), also known as “correlation coefficients” for regression models.

Keystrokes

Screen

By default, the diagnostic values are not displayed with the results of a regression model. For example, when we compute a linear regression with **L1** and **L2**, the calculator displays only the linear and constant coefficients for the model.

```
LinReg
y=ax+b
a=1.128013777
b=-.1650401837
```

We can turn the Diagnostic Display mode on by following the steps below:

The **CATALOG** is an alphabetical list of all calculator functions. Enter the **CATALOG**:


```
CATALOG
▶abs(
and
angle(
ANOVA(
Ans
Archive
Asm(
```

Note the “**A**” in the upper right hand corner, indicating that the **ALPHA-LOCK** has been set. You can use the up and down arrows to maneuver up and down the list or you can jump to functions starting with specific letter. We want “**DiagnosticOn**” so enter the following:


```
CATALOG
▶dbd(
▶Dec
Degree
DelVar
DependAsk
DependAuto
det(
```



Now scroll down to “**DiagnosticOn**”:

 [8 times]

```
CATALOG
Degree
DelVar
DependAsk
DependAuto
det(
DiagnosticOff
▶DiagnosticOn
```

Press  twice and recalculate the linear regression again. Note that both r and r^2 are displayed.

```
LinReg
y=ax+b
a=1.128013777
b=-.1650401837
r^2=.9637161184
r=.9816904392
```

Note: the Diagnostic Display will stay ‘on’ unless you reset the memory of your calculator.

More questions? Contact the **Metropolitan State University Math Center** at 651-793-1460, 651-793-1463 (Fax) or math.center@metrostate.edu.