Testing linear correlation coefficient \( r \):

\[ H_0 : \rho = 0 \Rightarrow \text{Linear Correlation is not significant} \]

\[ H_1 : \rho \neq 0 \Rightarrow \text{Linear Correlation is significant} \]

Where \( \rho \) is the greek letter and it is pronounced \( \text{rho} \).

Using Pearson Correlation Coefficient Critical Value (\( PCC-CV \)) Method

1. Find PCC–CV Using TI:

   \[ \text{PRGM} > \text{RVAL} > \text{ENTER (Twice)} > 2: 2 \text{TAIL TEST} \]

   and \[ \text{No. PTS = n} \] simply refers to the number of points in the sample.

2. Conclusion:
   - When \( |r| > \text{PCC–CV} \), then Linear Correlation is significant.
   - When \( |r| \leq \text{PCC–CV} \), then Linear Correlation is not significant.

Predicting \( y \) value for a given \( x \) value:

- Use \( y = a + bx \) when linear correlation is significant.

  Plug in the given \( x \) value to find the prediction value \( y \).

- Use \( \bar{y} \) when linear correlation is not significant.