# Regression in the NBA

Your turn to run a regression analysis on the 2017 NBA Season.

## Instructions

\* Run a regression analysis on the 2017 NBA season stats.

\* You will use `PTS` (points) as your Y variable, or dependent variable.

\* You will determine which X variables, or independent variables, to use.

Independent Variable: Minutes Played

\* After you have run regression, explain why your choice was or was not a good choice.

I considered the more time player spend on playing, the more points they will gain based on good practice.

\* Do the results have a good `R Square` value?

Yes. The R Square is 0.82.

\* Is your choice statistically reliable?

My statistically is reliable because of the high R^2, which indicates the strong relationship between the points and the minutes Played. In addition, the significance F is close to 0 for this regression, which give us strong confidence with this regression.

\* Explain what your coefficients mean.

The coefficient for Intercept is -80.82, which indicates the value we would predict for Points if the Minutes Played is 0.

The coefficient for Minutes Played is 0.51, which indicates if the Minutes Played differed by one unit, the Points will differ by 0.51 units, on average.

\* Finally produce a scatter plot and explain your overall analysis.

Please see the worksheet “Chart” for scatter plot.

The linear regression model with one predictor (Minutes Played) can be expressed with the following equation:

Y = -80.82 + 0.51 \* X

According to the p-value (<0.05) for both Intercept and Minutes Played, and the value of significance F is closed to 0, we have strong evidence to indicate this regression is reliable and trustable. It is a strong (R^2 is high with 0.82) and positive relationship between Minutes Played and Point.