

NBA Regression Analysis

Y Variable: Total Points Scored in 2017 NBA Season

X Variable: Total Minutes Played in the 2017 NBA Season

Regression Analysis SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.90492126
R Square	0.81888249
Adjusted R Square	0.81857706
Standard Error	200.246291
Observations	595

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	107508994	107508994	2681.11745	3.497E-222
Residual	593	23778456.1	40098.577		
Total	594	131287451			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>
Intercept	-80.816352	13.5095084	-5.982183	3.8087E-09	-107.34865	54.284049	-107.3
Minutes Played	0.50936002	0.0098371	51.779508	3.497E-222	0.49004023	0.5286798	0.4900

Regression Equation

$$Y (\text{Points}) = 0.5094 \times (\text{Minutes}) - 80.8163$$

Do the results have a good R Square value?

Yes, the R squared value of 0.812 indicates that there is a strong correlation between minutes played and amount of points scored in a season.

Is your choice statistically reliable?

That question depends on what exactly this is trying to measure. Looking at how many minutes someone plays would generally be a good way to figure out who the best scorers are because

those players tend to play more anyways. Minutes played is really a proxy for other talents, so this stat does not help explain what makes these players better than others at all.

Explain what your coefficients mean.

The value of .5094 for x means that for every 1 unit increase in minutes played, an NBA player is expected to have scored 0.5094 more points throughout the season.

Scatter Plot:

