1145-B5-126 **Stanley Rothman*** (stanley.rothman@quinnipiac.edu), 15 stacy ct, Cheshire, CT 06410. New Applications of the Linear Regression Formulas to the MLB, NBA, and NFL.

In my talk last year, using properties common to teams in the MLB, the NBA, and the NFL, I created a new General Linear Theorem (GLTH). From this GLTH, I produced three new linear regression equations, one for the MLB, one for the NBA, and one for the NFL, to predict a team winning percentage for any completed season using its run and point difference for an entire season. In this year's talk, I produce three new linear regression equations to predict a team winning percentage, after any fixed number of games during any season. Using these new linear regression equations, we can determine a team's performance, over or under, at any point in a season. Finally, I demonstrate a technique to compare parity between seasons in one league and seasons in another league by comparing the NBA 2017-18 season with the MLB 2017 season. (Received August 06, 2018)