

The **computer algorithm** works as follows:

There are five criteria incorporated in the formula for rating teams. They include:

- (1) Margin-Of-Difference rating or Power Rating (**PR***)
- (2) Strength of Schedule (based on the RPI method) (**SOS**).
- (3) Ratings Percentage Index or RPI method (**RPI**).
- (4) Quality Wins Factor where points are accrued for wins and losses based on the RPI rating of the opponent. For example, a win against a team ranked at or near the top of the RPI will count more than a win against a team ranked in the middle or low end of the RPI rankings. Conversely, a loss against a team with a low RPI ranking will 'hurt' more than a loss against a team with a high RPI ranking (**QWF**).
- (5) Win-Loss Record (**WL**).

Formula:

- $\text{Rating} = \text{weight}_1 * \text{PR} + \text{weight}_2 * \text{SOS} + \text{weight}_3 * \text{RPI} + \text{weight}_4 * \text{QWF} + \text{weight}_5 * \text{WL}$ **(1)**
- $\text{weight}_1 + \text{weight}_2 + \text{weight}_3 + \text{weight}_4 + \text{weight}_5 = 1.0$ **(2)**

PR, SOS, RPI, QWF and **WL** are the rankings of each team within their league.

So consider a league of 40 teams. Each team has a ranking for PR, SOS, RPI, QWF and WL of 1 to 40 where 1 is the best and 40 is the worst. Now if one only uses PR and not the rest of the criteria, then the weight factors are set at 1,0,0,0,0. If one wants all five factors to be used but wants QWF to be more important, than the weight factors could be 0.15, 0.15, 0.15, 0.40 and 0.15. If weight factors add up to greater than 1.0, they are normalized to be a sum of 1.0.

PR* includes a goal limit from 5 to 20 where if the margin of difference exceeds the goal factor, then the scores are adjusted in the PR calculation so that the margin of difference is reduced to the limit set. For example, if there is a 5 goal limit and a team wins 20 to 5, the score entering the PR calculation is reduced to 10 to 5.