

World Cup Advertising

Activity: For their video game, EA Sports ranked the top six non-goalie, soccer players in the world as: Ronaldo, Messi, Neymar, Suarez, & Lewandowski. The rankings are calculated using Pace, Shooting, Passing, Dribbling, Defending, and Physicality as given in the table below.

Rank	Name	Pace	Shooting	Passing	Dribbling	Defending	Physicality
1	Ronaldo	90	93	82	90	33	80
2	Messi	89	90	86	95	26	61
3	Neymar	92	84	79	94	30	60
4	Suarez	82	90	79	86	42	81
5	Lewandowski	81	88	75	86	38	82
6	Ramos	76	63	71	72	88	83

Suppose FIFA wanted to create a special marketing campaign that would highlight these players and hopefully draw additional interest in the competition (not that the World Cup needs it). The marketing campaign will be composed of eight segments, and each segment will focus on one individual player from the above list and his country of origin. Players may be the focus of multiple segments but each segment will be on exactly one player.

1. Given the above point totals for individual skills, assign a Value to each player using the following formula.

$$V = 100 * \text{Defending} + 10 * (\text{Pace} + \text{Physicality}) + 1 * (\text{Shooting} + \text{Passing} + \text{Dribbling})$$

2. Using this value in place of votes, determine the qualification value for the Hill-Huntington method. Are any players eliminated from the marketing campaign?
3. Using Hill-Huntington, determine the allocation of segments to players.
4. For a comparison, if segments *could* have focused on multiple players (ie. allow for fractional segments), what proportion of segments does each player deserve?
5. Suppose all players must be allocated at least one full segment; repeat the above Hill-Huntington calculation without disqualifying any players and initially assigning one full segment to each player.