**Chapter 8 Reading Guide:** *Standardized Scores and Normal Distributions (part 3)*

***Directions:*** *please use our textbook “Statistical Reasoning in Sports” to answer the questions in the following Chapter 8 Reading Guide concerning Normal Distribution. You will have until the end of the period Tomorrow (Thursday 3/4/15) to have this fully completed. You will have a quiz over the material in this reading guide at the end of the period tomorrow.*

1. *How do we* ***Standardize Statistics***? Answer this question by answering the questions below concerning the Major League Baseball players Ichiro and Dunn:
   1. What was the batting average of *Ichiro* during the 2009 season?
   2. Explain in ***the Most Detail you can***: *What does the number “0.082”* represent for Ichiro, how did they calculate it?
   3. What are they talking about when they say, “…we will compare these deviations from the mean to the *typical* distance from the mean…”. What are they referring to by saying “***typical distance***”? (*Again, be detailed in your answer*)
   4. How did they determine how far **Ichiro’s** **PERFORMANCE** was *above the mean*?
   5. Also, how did they then calculate ***how many Standard Deviations Ichiro’s PERFORMANCE*** was above the mean?
   6. How many HR’s did *Dunn* have during the 2009 season?
   7. Explain in ***the Most Detail you can***: *What does the number “22.7”* represent for Dunn, and how did they determine how far **Dunn’s** **PERFORMANCE** was *above the mean*?
2. Now that you see how they ***Standardize a Player’s score to everyone elses in a sample (called determining a player’s Z-SCORE),*** *Explain to me how the book says the Fantasy League calculate a player’s worth?*
3. Give an example (you can use their’s) of how the Fantasy League calculated the Z-Score of Ichiro and Dunn.
   1. Which variables did Ichiro do better than Dunn?
   2. Which variables did Dunn do better than Ichiro?
   3. Who was the better player according to their ***z-score calculation and comparison***
4. Give me summary of what the book says about ***What would count as UNUSUAL when it comes to standardized scores***:
5. Give me a summary of what ***“THE 68-95-99.7 RULE”*** is when it comes to nearly all symmetrical data distrivbutions: