AP Statistics

Summer Assignment

Statistics is a math course unlike every other math course you have taken. You will never sit in class and wonder "When will I ever use this?" or "Why am I learning this?". Turn on the news, read the newspaper, look around you – statistics are everywhere! Real people use statistics in their real lives everyday to make decisions. My average grocery bill is lower at *this* store, I have a better chance at winning *this* game, I'll probably make more money with *this* major… we say things like this all the time.

In AP Statistics you will do more writing than in any other math course. A statistic is a number with a context, and the context matters. The same percentage can mean very different things in different situations. To get you ready for the wonderful world of statistics, you do not need to complete a packet of Algebra review problems, you need to be ready to see the context and write about it. So… below is a list of books for you to choose from. You are to choose a book from the list below, read it and write a two page reflection.

Your reflection paper should include:
1. The title and author of the book you chose and why you chose it.
2. A *brief* description of the book.
3. The problem:
   a. What was the decision being made or central problem/question of the book?
   b. What data or statistics were used and how were the data gathered?
   c. What solution or conclusion did the author make?
4. Were there any "Aha" moments for you? Did you learn something or find something interesting?

Here is your list of books, happy reading!

Bringing Down the House: The Inside Story of Six MIT Students Who Took Vegas for Millions, Ben Mezrich

The Lady Tasting Tea, David Salsburg

The Unfinished Game, James Devlin

Outliers: The Story of Success, Malcom Gladwell

Against The Gods: The Remarkable Story of Risk, Peter L. Bernstein

Sundown Towns: A Hidden Dimension of American Racism, James Loewen

Predictably Irrational: The Hidden Forces that Shape our Decisions, Dan Ariely

The Panic Virus: The True Story Behind the Vaccine-Autism Controversy, Seth Mnookin

How to Lie with Statistics, Darrell Huff

6   An A Response: (30/30)

- **Excellent** and **thorough** in-depth discussion of the central issue of the book; **correct and complete** identification of examples of statistics or probability content with **well-selected** specific examples and quotations from the material
- **Sophisticated** and **complete** analysis of the material
- **Well-organized** response that is carefully arranged and flows well
- **Very few or no errors** in spelling, punctuation, or grammar
- **All requirements** of the assignment are completed

5   An A- Response: (27/30)

- **Very good** discussion of central issue; correct identification of statistics or probability content with specific examples and quotations from the material
- **Strong** analysis of materials
- **Well-organized** response with logical arrangement
- **Very few errors** in spelling, punctuation, or grammar
- **All requirements** of the assignment are completed

4   A B Response: (25/30)

- **Solid** discussion of central issue; good examples used
- **Good** analysis of material
- **Organized** response
- **Few** errors in spelling, punctuation, or grammar
- **All or nearly all** requirements are completed

3   A C Response: (22/30)

- **Adequate** discussion of central issue; some examples used
- **Adequate** analysis of material; analysis incomplete or partly incorrect
- **Organized** response that could be re-arranged or could use transitions
- **Some errors** in grammar, spelling, or punctuation but these don't interfere with communication or understanding of material
- **All or nearly all** requirements of the assignment are completed; minor parts may have been overlooked

2   A D Response: (19/30)

- **Partial** discussion of central issue; some examples used but often these aren't specific
- **Minimal analysis** of material—some analysis missing or shows mis-reading of scene
- **Shows limited organization** or arrangement or flows poorly
- **Several errors** in grammar, spelling, and punctuation often suggest lack of proofreading
- **Some requirements** of assignment incomplete or missing

1   An E Response (1/2 credit): (15/30)

- Similar to a D response above, but often is **incomplete or well-below the assigned minimum length** or shows other major errors

0   A Zero Response (no credit): (0/30)

- An assignment **not turned in** or has any element of **plagiarism**