

2010 Indiana Academic Super Bowl
Junior Division Math
An American Generation: 1964 - 1980
Final Study Guide



- I. Sets (30%)
 - A. Subsets, cardinality
 - B. Venn diagrams
 - C. Union, intersection, complement

- II. Statistics (30%)
 - A. Data analysis
 - B. Measures of central tendency
 - C. Percentiles and quartiles

- III. Probability (40%)
 - A. Fundamental Counting Principle
 - B. Permutations and combinations
 - C. Probabilities with “not” and “or”
 - D. Conditional probability
 - E. Expected value
 - F. Odds

As this topic has been considered, the idea is to stretch (a bit) the “basics” of statistics and probability found in middle school/junior high. All questions need to come from middle school level math texts, including pre-algebra and algebra texts found at 7th and 8th grade level. Some of the topics above extend just a bit beyond state math standards for grades 6 – 8.

NOTE: This outline was developed by coaches who chose to attend two meetings in March and November 2008.

We have chosen the dates 1964-1980 for several reasons. Many historians place the end of the “Fifties” at November 22, 1963. The social movements, music, and general culture of the years following the assassination of President Kennedy tend to constitute our concept of the 1960’s. The 1970’s, then, come to an end with the election of President Reagan.

