



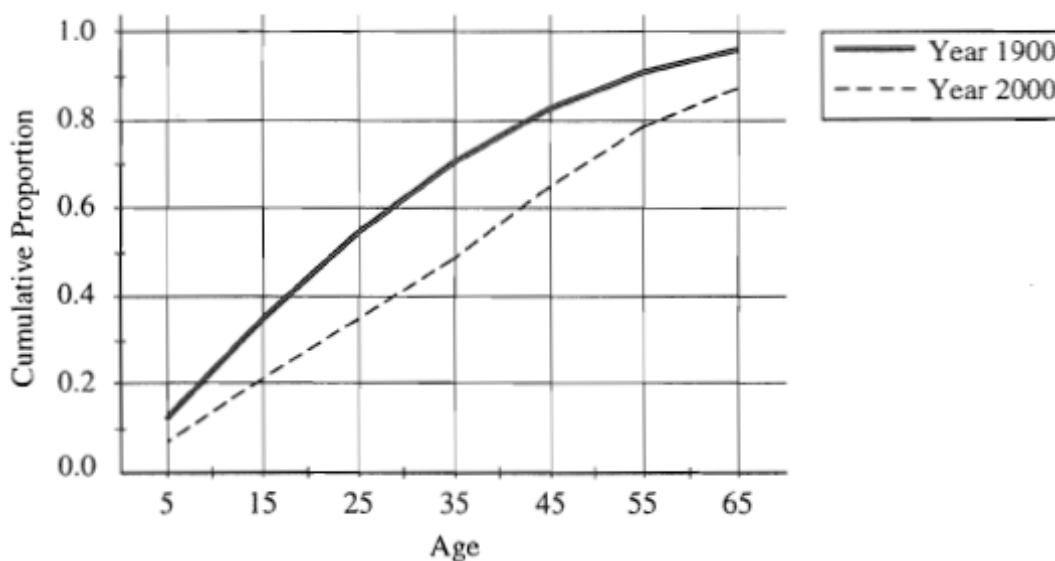
“FRAPPY” {Free Response AP Problem...Yay!}

The following problem is taken from an actual Advanced Placement Statistics Examination. Your task is to generate a complete, concise statistical response in 15 minutes. You will be graded based on the AP rubric and will earn a score of 0-4. After grading, keep this problem in your binder for your AP Exam preparation.

AGE DATA

Age	1900	2000
5	0.121	0.066
15	0.344	0.209
25	0.540	0.344
35	0.700	0.480
45	0.822	0.643
55	0.906	0.781
65	0.959	0.870

The table of data above provides the cumulative proportions for the United States population at selected ages for the year 1900 and 2000 (projected). For example, 0.344 or 34.4 percent of the population was at or under age 15 in 1900, while only 0.209 or 20.9 percent will be at or under age 15 in the year 2000. The graph below shows the cumulative proportions plotted against age for the years 1900 and 2000 (projected). The data and graph are to be used to compare the age distribution for the year 1900 with the projected age distribution for the year 2000.



- Approximate the median age for each distribution.
- Approximate the interquartile range for each distribution.
- Using the results from parts (a) and (b), write a sentence or two for a history textbook comparing the age distributions for the years 1900 and 2000.

Total: __/4