



AP Statistics 2000 Student Samples

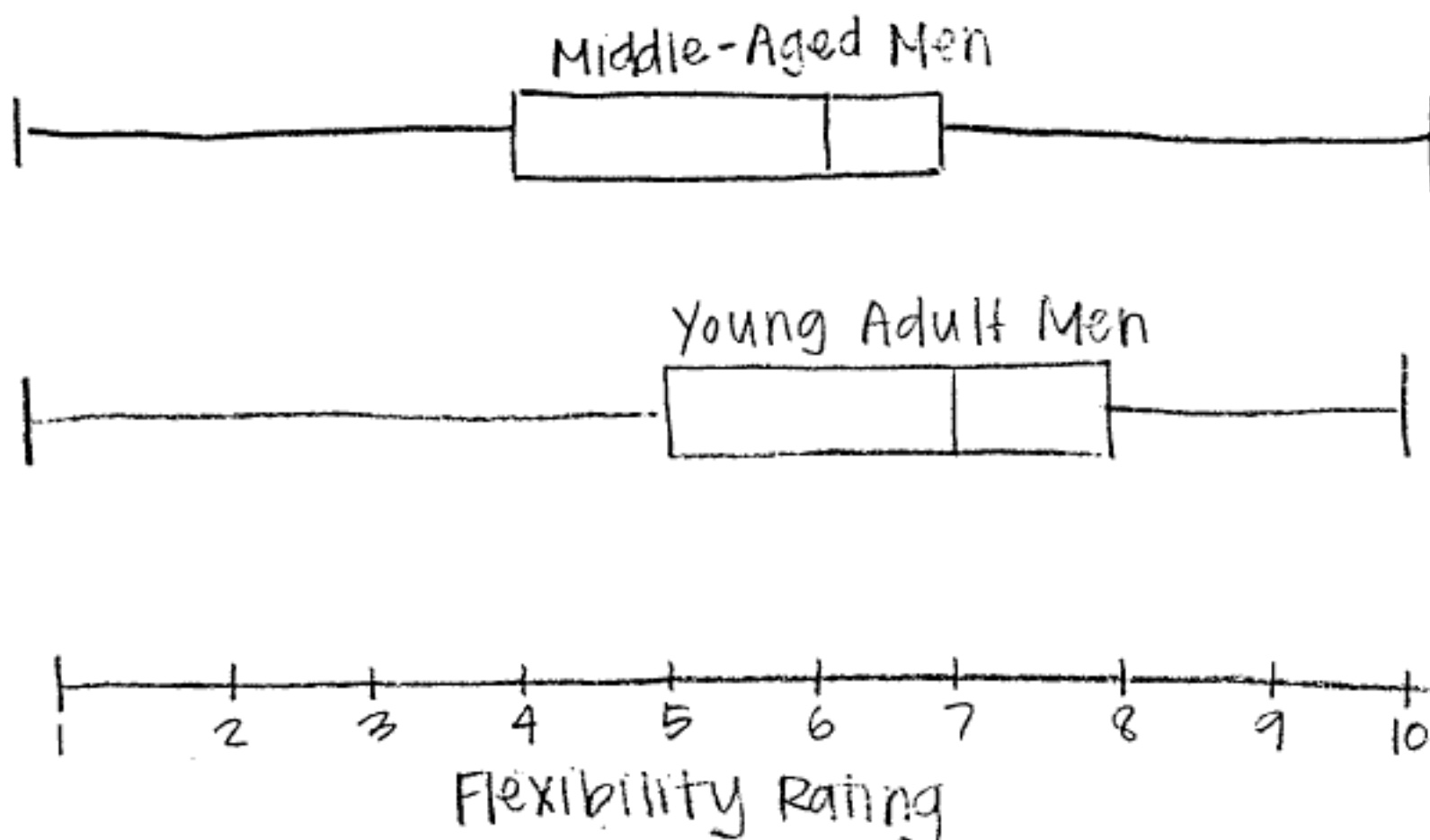
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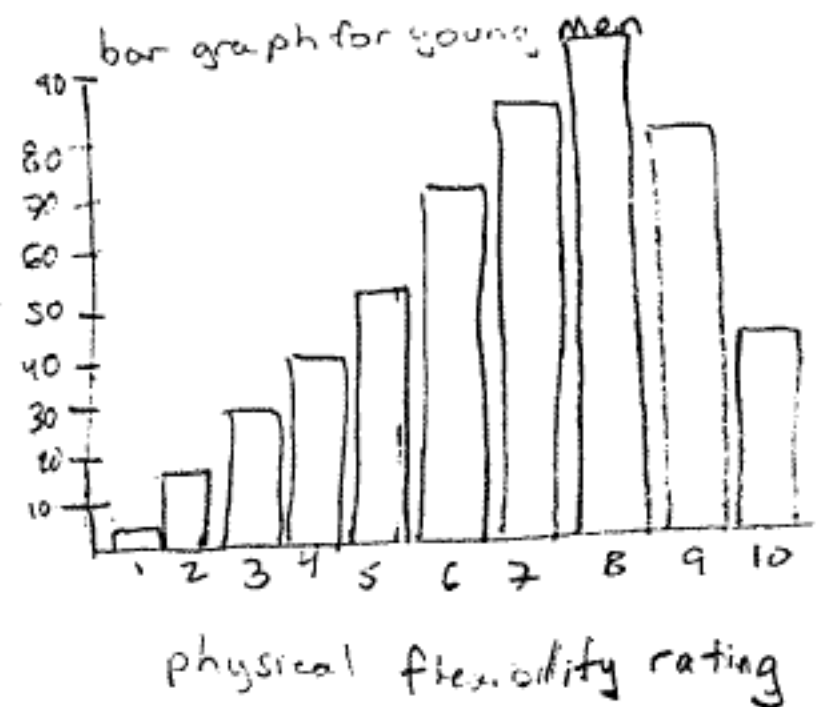
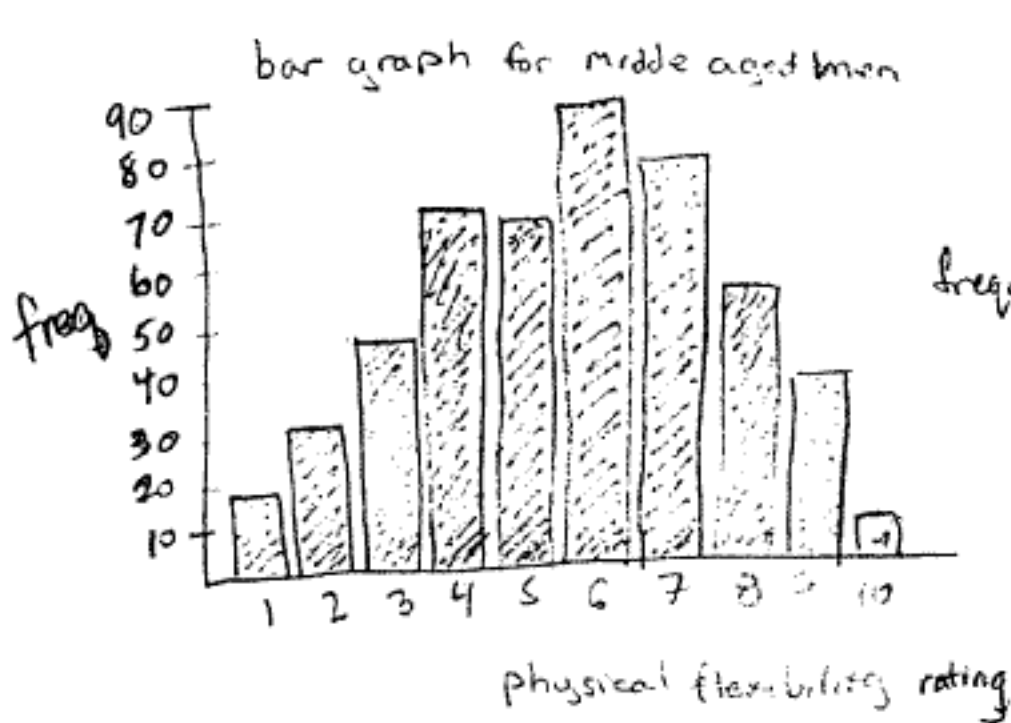
- (a) Display these data graphically so that the flexibility of middle-aged men and young adult men can be easily compared.



- (b) Based on an examination of your graphical display, write a few sentences comparing the flexibility of middle-aged men with the flexibility of young adult men.

The interquartile ranges of the boxplots of both young men & middle-aged men are the same $\rightarrow 3$, suggesting that the spread, or variation in flexibility, of each group is the same. However, the median flexibility for young adult men is 7, while the median for middle-aged men is 6, suggesting greater flexibility in young adult men than middle-aged men.

- (a) Display these data graphically so that the flexibility of middle-aged men and young adult men can be easily compared.



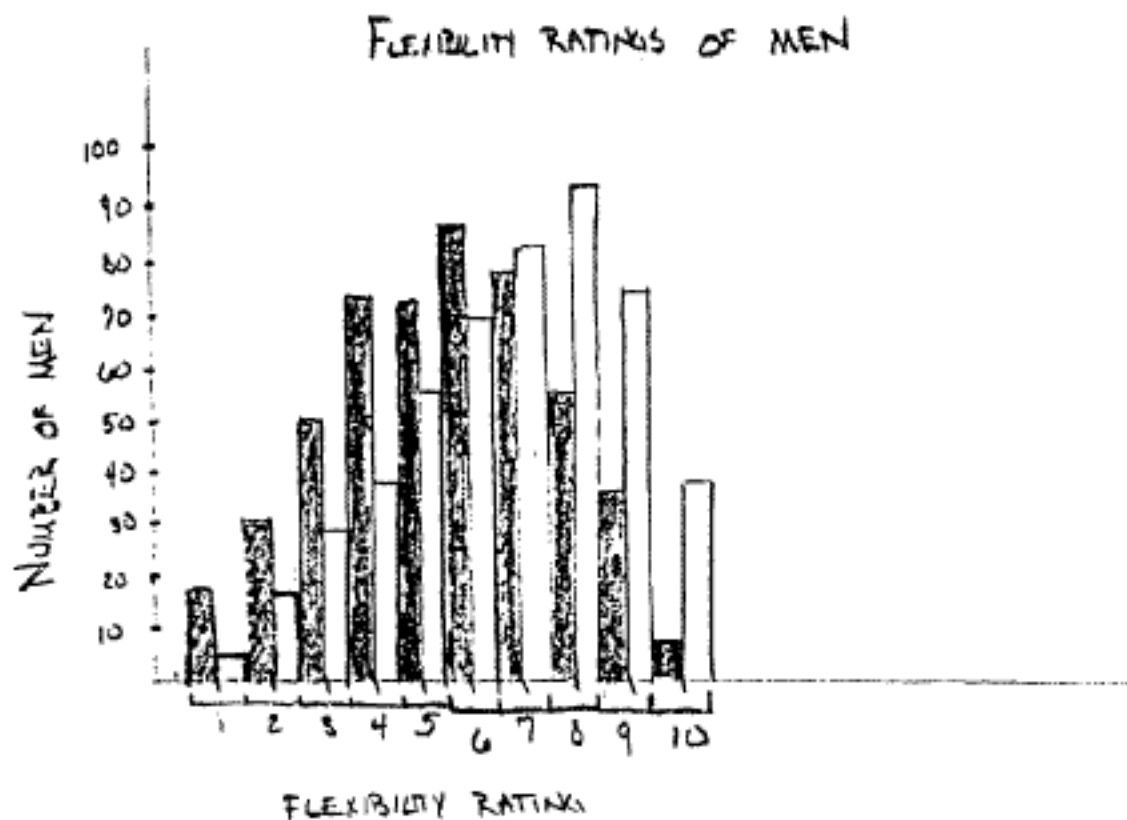
- (b) Based on an examination of your graphical display, write a few sentences comparing the flexibility of middle-aged men with the flexibility of young adult men.

It seems as if the distribution for middle aged men is more or less symmetric, while the one for young men is skewed to the left.

The mode is 8 for the young men and 6 for the middle aged men. The median and mean also look to be a bit higher in young men. This shows that on average, young men are slightly more flexible than middle-aged men.

GO ON TO THE NEXT PAGE.

- (a) Display these data graphically so that the flexibility of middle-aged men and young adult men can be easily compared.



SHADED BARS: MIDDLE-AGED MEN

WHITE BARS: YOUNG ADULT MEN

- (b) Based on an examination of your graphical display, write a few sentences comparing the flexibility of middle-aged men with the flexibility of young adult men.

MOST MIDDLE-AGED MEN HAD A FLEXIBILITY RATING CENTERED AROUND 6, WHILE MOST YOUNG ADULT MEN HAD A FLEXIBILITY RATING CENTERED AROUND 8. IN GENERAL, MOST YOUNG ADULT MEN WERE MORE FLEXIBLE THAN MOST MIDDLE-AGED MEN.

GO ON TO THE NEXT PAGE.