

## Special Problem 3C

## The Olympic Men's Long Jump

*Note: This is included as an example of an assignment that can be adapted to many timely sports situations.*

**Scenario.** As an intern at the *Washington Post*, you have been approached by the sports editor to do a historical piece on the Summer Olympics. The 1996 Olympics are fast approaching, and there is considerable interest across the country because they will be held next summer in Atlanta. Specifically, you have been asked to focus on the men's long jump event. The editor knows that statistics will play a key role in this story, and he knows that you are currently enrolled in the inaugural Advanced Placement Statistics program, and he wants to take advantage of your expertise.

Anxious to demonstrate your recently acquired knowledge of statistics, you rush to the library and consult the Almanac to find the data on winning long jumps. You find the following list of winning distances (in inches) for the long jump event in each Summer Olympics since 1896:

ROW	YEAR	DISTANCE	ROW	YEAR	DISTANCE	ROW	YEAR	DISTANCE
1	1896	250.00	9	1932	300.75	17	1972	324.50
2	1900	282.75	10	1936	317.50	18	1976	328.50
3	1904	289.00	11	1948	308.00	19	1980	336.25
4	1908	294.50	12	1952	298.00	20	1984	336.25
5	1912	299.25	13	1956	308.25	21	1988	343.25
6	1920	281.50	14	1960	319.75	22	1992	341.50
7	1924	293.00	15	1964	317.75			
8	1928	304.50	16	1968	350.50			

Your assignment is to do whatever you need to investigate this data set and then write a brief paper (article?) describing your findings and conclusions. Be sure to include in your paper: a statement of the problem (or background information), the data, and any plots you construct or statistical analyses you conduct as part of your investigation. Be sure to discuss patterns or trends that you find in the data, but also be sure to explain any deviations to the patterns in terms of historical events. (You may also want to actually consult the Almanac to see who won this event over the years. Also: Does any country "own" this event?)

As part of this assignment, the sports editor wants you to predict the winning distance for the 1996 Olympics in Atlanta. Think carefully about how you want to do this. If you modify procedures learned in class, make sure you state your reasons for using a modified approach.

When you write your paper, assume that your readers will be reasonably intelligent, but that they may not be as statistically literate as you are. If you use any technical (i.e., statistical) terms, you may want to briefly explain these terms as part of your story.

**Deadline.** Special Problem 3C will be due on \_\_\_\_\_  
But don't put it off—you don't want to be scooped!