The first Olympic Games of modern times were held in Athens, Greece, in 1896. They have been held every four years since, with three exceptions. They were not held in 1916, 1940, or 1944 because of World Wars I and II.

In this activity you'll explore the winning times and distances from all the Olympics in certain events. For these events, we have the time (or distance) of the gold-medal winner in each Olympics. You'll compare the men's results with the women's results.

Here is a data card from the 1948 Olympics, which were held in London. The names of the attributes are in the left column. The "w" in the *gender* row means that this card shows the women's gold-medal results for each event. The times for the *100Meters* and *200Meters* races are in seconds. The distances for the *HighJump* and *LongJump* are in meters. A meter is a little bit longer than a yard.

Case 37 of 52 (1) Value Unit Attribute Year 1948 London City 245 Altitude feet w Gender 11.9 seconds 100Meters 200Meters 24.4 seconds HighJump 1.68 meters LongJump 5.7 meters

Think About It

Before you look at data, think about what you expect

to see. You probably already have some ideas about what these data look like.

1. How do you think the women's gold-medal times in the 100-meter dash will compare with the men's gold-medal times? If you think one gender's times will be better than the other's, about how much better will they be?

2. Suppose there is a difference in the gold-medal times for men and for women. Do you think that over the years the difference is getting bigger, getting smaller, or staying the same?



Men and Women at the Olympics (continued)

Plot and Investigate

Now you'll look at the data to see what they say.

- 3. Open the document **Olympics Men Women.tp.** You should see a stack of data cards like the one on the previous page.
- 4. You made a guess about how the gold-medal times in the 100-meter dash compare for men and women. Make a graph that you can use to answer this question. Include a copy of your graph with your assignment.
- 5. Are one gender's gold-medal times better than the other's in the 100-meter dash? Explain. Your answer should say how your graph backs up your conclusion.

- 6. If you think the results show that one gender tends to have better times than the other, about how many seconds better is the faster gender?
- 7. Explain how you came up with your answer to Step 6.

8. Choose another event in which both men and women compete. Compare their goldmedal times (or distances). Include a copy of the graph you make, and explain what you think the graph shows.