10.2 Exercises

Men's Discus Throw In Exercises 1–4, use the graph. (See Examples 1 and 2.)



- 1. Describe any patterns in the graph.
- **2.** The concrete throwing circle was introduced to the Olympic discus throw in 1954. Discuss the impact of the concrete throwing circle on the winning distances.
- **3.** The Olympics were not held in 1940 or 1944 because of World War II. Based on the graph, what do you think the winning distance would have been in 1940 if the Olympics had been held? Explain your reasoning.
- **4.** What is a reasonable expectation for the winning distance in the 2012 Olympics? Explain your reasoning.



Women's Discus Throw The winning distances for the women's discus throw are shown. In Exercises 5 and 6, use the data. (*See Example 1.*)

(1928, 39.62), (1932, 40.58), (1936, 47.63), (1948, 41.92), (1952, 51.42), (1956, 53.69), (1960, 55.10), (1964, 57.27), (1968, 58.28), (1972, 66.62), (1976, 69.00), (1980, 69.96), (1984, 65.36), (1988, 72.30), (1992, 70.06), (1996, 69.66), (2000, 68.40), (2004, 67.02), (2008, 64.74)

- 5. Sketch a graph of the winning distances. Describe any patterns in the graph.
- 6. Sketch a graph that shows the Olympic record for each of the years in the data set.