

4. When filling in your own answer sheet, what two things might you do to make sure that it's *not* a function? When you do these things on a real exam, what kind of credit do you get?

Many of the tables in Chapter 4 of Book 1a describe functions. For instance, the table in Display 4.10—shown again here in Display 6.6—is a function from the set of Olympic years from 1912 through 2004 (the domain) to the set of running times listed in the right column (the range). Using function notation, if we called this function  $t$ , we could write

$$\begin{aligned} t(1904) &= 116.0 \\ t(1908) &= 112.8 \\ t(1912) &= 111.9 \\ t(1920) &= 113.4 \\ &\vdots \end{aligned}$$

Years and Times for Olympic 800-meter Finishes	
Year	Running Time (in seconds)
1904	116.0
1908	112.8
1912	111.9
1920	113.4
1924	112.4
1928	111.8
1932	109.8
1936	112.9
1948	109.2
1952	109.2
1956	107.7
1960	106.3
1964	105.1
1968	104.3
1972	105.9
1976	103.5
1980	105.4
1984	103.0
1988	103.45
1992	103.66
1996	102.58
2000	105.08
2004	104.45

Display 6.6

