LOGIC PROBLEM 10

NICOLE'S COLLECTION

by David V. Johnson

Nicole uses part of her allowance to fund her collection of coins. Her collection consists of pennies, nickels, dimes, quarters, and half-dollars from five different collection years: the years of two of her grandparents' births (1930 and 1931), the years of her parents' births (1955 and 1957), and the year of her birth (1994). From this information and the following clues, can you determine for each collection year the number of coins Nicole has of each denomination, the total number of coins of each denomination, and the total number of all coins in her collection?

1. The number of coins for each denomination doubles from one collection year to the next.

2. The 1930 collection contains a different number of coins for each denomination, but these are, in some order, consecutive numbers.

3. The entire collection numbers between 1,000 and 1,200 coins.

4. In the 1930 collection, the number of quarters is one more than the number of dimes.

5. The total number of half-dollar coins in the collection is 93 more than the total number of nickels.

6. In the 1955 collection, the number of pennies is 12 more than the number of dimes.

Solution is on page 80.

The fill-in chart below was found to be most helpful in solving this Logic Problem.

	pennies	nickels	dimes	quarters	half-dollars
1930					
1931					
1955					
1957					
1994					
total		+	+	+	+

= _____ coins