TABLE **7.8** **Effect of sample size on the width of 95% confidence intervals for $\hat{y}_0$ in the simulated data of table 5.1**

Sample size	$\hat{y}_0$	*Population standard deviation of* $\hat{y}_0$	*Lower bound of confidence interval for* $E(y_0)$	*Upper bound of confidence interval for* $E(y_0)$	*Width of confidence interval for* $E(y_0)$
20	35,023	5,590.2	23,278	46,768	23,490
100	35,023	2,500.0	30,060	39,985	9,925.0
1,000	35,023	790.57	33,473	36,572	3,099.0
10,000	35,023	250.00	34,533	35,513	980.00
100,000	35,023	79.057	34,868	35,178	309.90

NOTE: *The prediction of* $\hat{y}_0$ *is at the sample average value for* x_0, *13, for all samples.*