

TABLE 4.4  $R^2$  calculation, rooms and rent

| Observation | $bx_t$ | $y_t = a + bx_t$ | $e_t = y_t - \hat{y}_t$ | $e_t^2$      | $(y_t - \bar{y})^2$ |
|-------------|--------|------------------|-------------------------|--------------|---------------------|
| 1           | 96.65  | 411.04           | -211.04                 | 44,539.26    | 209,306.25          |
| 2           | 193.30 | 507.69           | 382.31                  | 146,158.67   | 54,056.25           |
| 3           | 193.30 | 507.69           | 32.31                   | 1,043.74     | 13,806.25           |
| 4           | 193.30 | 507.69           | -87.69                  | 7,690.06     | 56,406.25           |
| 5           | 193.30 | 507.69           | -277.69                 | 77,113.38    | 182,756.25          |
| 6           | 193.30 | 507.69           | 192.31                  | 36,982.00    | 1,806.25            |
| 7           | 289.95 | 604.34           | -204.34                 | 41,755.92    | 66,306.25           |
| 8           | 289.95 | 604.34           | -254.34                 | 64,690.19    | 94,556.25           |
| 9           | 289.95 | 604.34           | 75.66                   | 5,724.03     | 506.25              |
| 10          | 289.95 | 604.34           | 75.66                   | 5,724.03     | 506.25              |
| 11          | 386.60 | 700.99           | 179.01                  | 32,043.73    | 49,506.25           |
| 12          | 386.60 | 700.99           | -20.99                  | 440.68       | 506.25              |
| 13          | 386.60 | 700.99           | -250.99                 | 62,997.17    | 43,056.25           |
| 14          | 386.60 | 700.99           | 219.01                  | 47,964.34    | 68,906.25           |
| 15          | 386.60 | 700.99           | -290.99                 | 84,676.56    | 61,256.25           |
| 16          | 386.60 | 700.99           | -250.99                 | 62,997.17    | 43,056.25           |
| 17          | 386.60 | 700.99           | 139.01                  | 19,323.12    | 33,306.25           |
| 18          | 483.25 | 797.64           | 502.36                  | 252,363.49   | 412,806.25          |
| 19          | 579.90 | 894.29           | 405.71                  | 164,599.17   | 412,806.25          |
| 20          | 869.85 | 1,184.24         | -354.24                 | 125,486.60   | 29,756.25           |
| Sum         |        |                  | 0                       | 1,284,313.32 | 1,834,975.00        |