

Question #275

Key: A

The annual dental charges are simulated from

$$u = 1 - e^{-x/1000}$$

$$x = -1000 \ln(1 - u).$$

The four simulated values are 356.67, 2525.73, 1203.97, and 83.38. The reimbursements are 205.34 (80% of 256.67), 1000 (the maximum), 883.18 (80% of 1103.97), and 0. The total is 2088.52 and the average is 522.13.