

129. Key: B

The reimbursement is positive if health care costs are greater than 20, and because of the memoryless property of the exponential distribution, the conditional distribution of health care costs greater than 20 is the same as the unconditional distribution of health care costs.

We observe that a reimbursement of 115 corresponds to health care costs of 150 ($100\% \times (120 - 20) + 50\% \times (150 - 120)$), which is 130 greater than the deductible of 20.

Therefore, $G(115) = F(130) = 1 - e^{-\frac{130}{100}} = 0.727$.