

### Question #109

Answer: A

$$\begin{aligned} EPV (x's \text{ benefits}) &= \sum_{k=0}^2 v^{k+1} b_{k+1} {}_kP_x q_{x+k} \\ &= 1000 \left[ 300v(0.02) + 350v^2(0.98)(0.04) + 400v^3(0.98)(0.96)(0.06) \right] \\ &= 36,829 \end{aligned}$$