

**Question #62****Answer: D**

$$\begin{aligned}\bar{A}_{28:\overline{2}|}^1 &= \int_0^2 e^{-\delta t} \frac{1}{72} dt \\ &= \frac{1}{72\delta} (1 - e^{-2\delta}) = 0.02622 \text{ since } \delta = \ln(1.06) = 0.05827\end{aligned}$$

$$\ddot{a}_{28:\overline{2}|} = 1 + v \left( \frac{71}{72} \right) = 1.9303$$

$$\begin{aligned}{}_3V &= 500,000 \bar{A}_{28:\overline{2}|}^1 - 6643 \ddot{a}_{28:\overline{2}|} \\ &= 287\end{aligned}$$