

Question #97

Answer: B

$$\pi \ddot{a}_{30:\overline{10}|} = 1000A_{30} + P(IA)_{30:\overline{10}|}^1 + (10\pi)({}_{10|}A_{30})$$

$$\begin{aligned}\pi &= \frac{1000A_{30}}{\ddot{a}_{30:\overline{10}|} - (IA)_{30:\overline{10}|}^1 - 10{}_{10|}A_{30}} \\ &= \frac{1000(0.102)}{7.747 - 0.078 - 10(0.088)} \\ &= \frac{102}{6.789} \\ &= 15.024\end{aligned}$$