

Question #88

Answer: B

$$e_x = p_x + p_x e_{x+1} \Rightarrow p_x = \frac{e_x}{1 + e_{x+1}} = \frac{8.83}{9.29} = 0.95048$$

$$\ddot{a}_x = 1 + vp_x + v^2 {}_2p_x + \dots$$

$$\ddot{a}_{x:\overline{2}|} = 1 + v + v^2 {}_2p_x + \dots$$

$$\ddot{a}_{x:\overline{2}|} - \ddot{a}_x = vq_x = 5.6459 - 5.60 = 0.0459$$

$$v(1 - 0.95048) = 0.0459$$

$$v = 0.9269$$

$$i = \frac{1}{v} - 1 = 0.0789$$