

Question: #148

Answer: E

$$(DA)_{80:\overline{20}|}^1 = 20vq_{80} + vp_{80}((DA)_{81:\overline{19}|}^1)$$

$$q_{80} = .2 \quad 13 = \frac{20(.2)}{1.06} + \frac{.8}{1.06}(DA)_{81:\overline{19}|}^1$$

$$\therefore (DA)_{81:\overline{19}|}^1 = \frac{13(1.06) - 4}{.8} = 12.225$$

$$q_{80} = .1 \quad DA_{80:\overline{20}|}^1 = 20v(.1) + v(.9)(12.225)$$
$$= \frac{2 + .9(12.225)}{1.06} = 12.267$$