

Solution # 277

Special Fully Discrete WL on (x)
 VDD over each year of age VDD

Calculate ${}_{3.5}V$

$${}_{3.5}V = (.5P_{3.5})(4V)v^{1/2} + (.5q_{3.5})(b_4)v^{1/2}$$

$$.5q_{3.5} = \frac{.5q_{x+3}}{1 - .5q_{x+3}} = \frac{.5(.101)}{1 - .5(.101)} = .0532$$

$$4V = \frac{(3V + \pi_4)(1+i) - (q_{x+3})(b_4)}{P_{x+3}}$$

$$4V = \frac{(96 + 24)(1.06) - (360)(.101)}{(1 - .101)} = 101.05$$

$$4V = 101.05 \quad .5q_{3.5} = .0532$$

$${}_{3.5}V = (1 - .0532)(101.05)(v_{1.06})^{1/2} + (.0532)(360)(v_{1.06})^{1/2}$$

$$= 111.53 \quad \boxed{E}$$