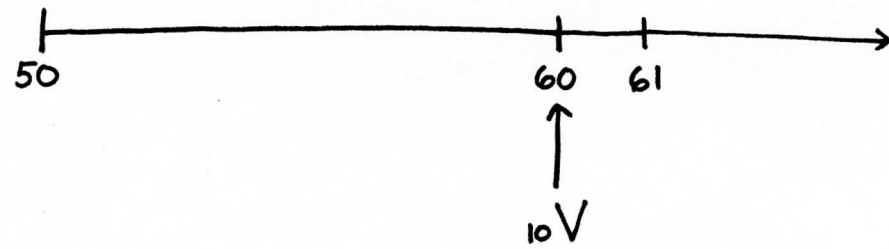


MLC #208

$$i = 0.06$$

$$1000q_{60} = 20$$

$$q_{60} = 0.02$$



$$1000_{10}V = 1000A_{60} - \underbrace{1000P_{50}}_{\text{Given: 25}} \cdot \ddot{a}_{60}$$

$$A_{60} = vq_{60} + vP_{60} \cdot A_{61}$$

$$A_{60} = 0.02/1.06 + 0.98/1.06 \times 0.440$$

$$A_{60} = 0.42566$$

$$\ddot{a}_{60} = \frac{1 - A_{60}}{d} = \frac{1 - 0.42566}{0.06/1.06} = 10.147$$

Benefit Reserve =  $1000_{10}V$   
at time 10

$$= \cancel{1000(0.42566)} - \cancel{1000(}$$

$$= 1000(0.42566) - 25(10.147)$$

$$= 425.66 - 253.675$$

$$= 171.99 \approx 172 \text{ (B)}$$