

Question #159**Answer: A**

$$1000_1V = \pi(1+i) - q_x(1000 - 1000_1V)$$

$$40 = 80(1.1) - q_x(1000 - 40)$$

$$q_x = \frac{88 - 40}{960} = 0.05$$

$$\begin{aligned} {}_1AS &= \frac{(G - \text{expenses})(1+i) - 1000q_x}{p_x} \\ &= \frac{(100 - (0.4)(100))(1.1) - (1000)(0.05)}{1 - 0.05} \\ &= \frac{60(1.1) - 50}{0.95} = 16.8 \end{aligned}$$