

Question # 97**Key: D**

Model Solution:

Severity after increase	Severity after increase and deductible
60	0
120	20
180	80
300	200

$$\begin{aligned}\text{Expected payment per loss} &= 0.25 \times 0 + 0.25 \times 20 + 0.25 \times 80 + 0.25 \times 200 \\ &= 75\end{aligned}$$

$$\begin{aligned}\text{Expected payments} &= \text{Expected number of losses} \times \text{Expected payment per loss} \\ &= 75 \times 300 \\ &= 22,500\end{aligned}$$