

## Question #288

Key: E

With probability  $p$ ,  $\text{Prob}(N = 2) = 0.5^2 = 0.25$

With probability  $(1 - p)$ ,  $\text{Prob}(N = 2) = \text{Combin}(4, 2) * 0.5^4 = 0.375$

$$\text{Prob}(N = 2) = p \times 0.25 + (1 - p) \times 0.375$$

$$0.375 - 0.125 p$$