Question #182
Key: B

The distribution is binomial with m = 100 and q = 0.03. The first three probabilities are:

$p_0 = 0.97^{100} = 0.04755,\ p_1 = 100(0.97)^{99}(0.03) = 0.14707,$

$p_2 = \frac{100(99)}{2}(0.97)^{98}(0.03)^2 = 0.22515.$

Values between 0 and 0.04755 simulate a 0, between 0.04755 and 0.19462 simulate a 1, and between 0.19462 and 0.41977 simulate a 2. The three simulated values are 2, 0, and 1. The mean is 1.