Question # 49
Answer: C

$$\mu = .5(0) + .3(1) + .1(2) + .1(3) = .8$$

$$\sigma^2 = .5(0) + .3(1) + .1(4) + .1(9) - .64 = .96$$

$$E(S_n^2) = \frac{n-1}{n}\sigma^2 = \frac{3}{4}(.96) = .72$$

$$bias = .72 - .96 = -.24.$$