

- 34.** The number of claims follows a negative binomial distribution with parameters β and r , where β is unknown and r is known. You wish to estimate β based on n observations, where \bar{x} is the mean of these observations.

Determine the maximum likelihood estimate of β .

(A) $\frac{\bar{x}}{r^2}$

(B) $\frac{\bar{x}}{r}$

(C) \bar{x}

(D) $r\bar{x}$

(E) $r^2\bar{x}$