Group__________ Names________________________________________

# Group Quiz for Section 10.3

1. Let $N$ be a Poisson random variable with parameter $n$, and let $\{X_i\}_{i=1}^{\infty}$ be i.i.d. exponential random variables, independent of $N$, with parameter $\lambda$. What is $\mathbb{E}\left[\sum_{i=1}^{N} X_i\right]$? Where are you using that the $X_i$ are independent of $N$?