Instructions

i. Parts carrying extra credits and starred problems are not required part of the assignment. Nevertheless, a serious attempt followed by a discussion of these during office hours is encouraged.

ii. Constructive comments on the assignments and for that matter any other aspect of the course will be welcomed.

Problem 1  Let $X$ be a exponential random variable with expectation of $\lambda$. For a given $d > 0$ find $E(X \wedge d)$, $\text{Var}(X \wedge d)$, $E((X - d)_+)$ and $\text{Var}((X - d)_+)$. 

Problem 2  Derive equation 2.5.2 on page 45 of Actuarial Mathematics.

The rest of the assignment is from BOWERS ET. AL. - They consist of problems 12.8 and 12.10.