

**(1) Suppose that X is a Geometric random variable with $p=1/3$
Find formulas for EX , $\text{Var}X$, and $P(2 < X < 5)$**

(2) Suppose that X is a continuous random variable with $f(x)=\exp(1-x)$ for $x > 1$ and 0 otherwise. Find formulas for EX , $\text{Var}X$, and $P(2 < X < 5)$