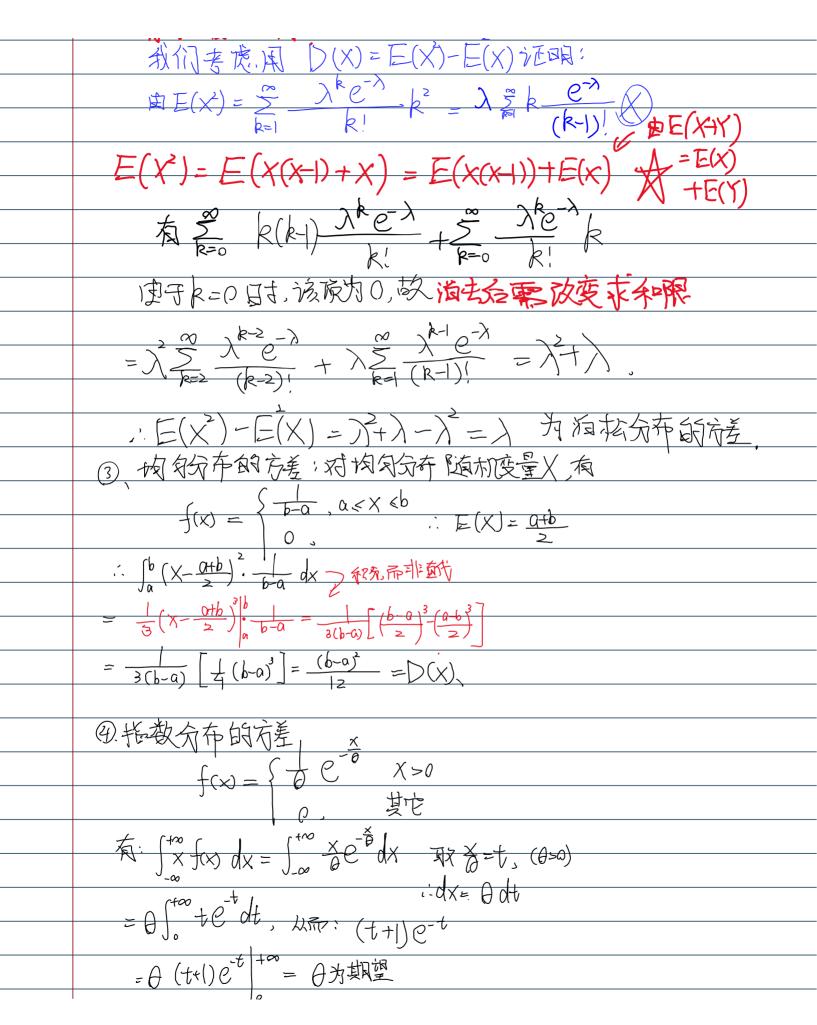
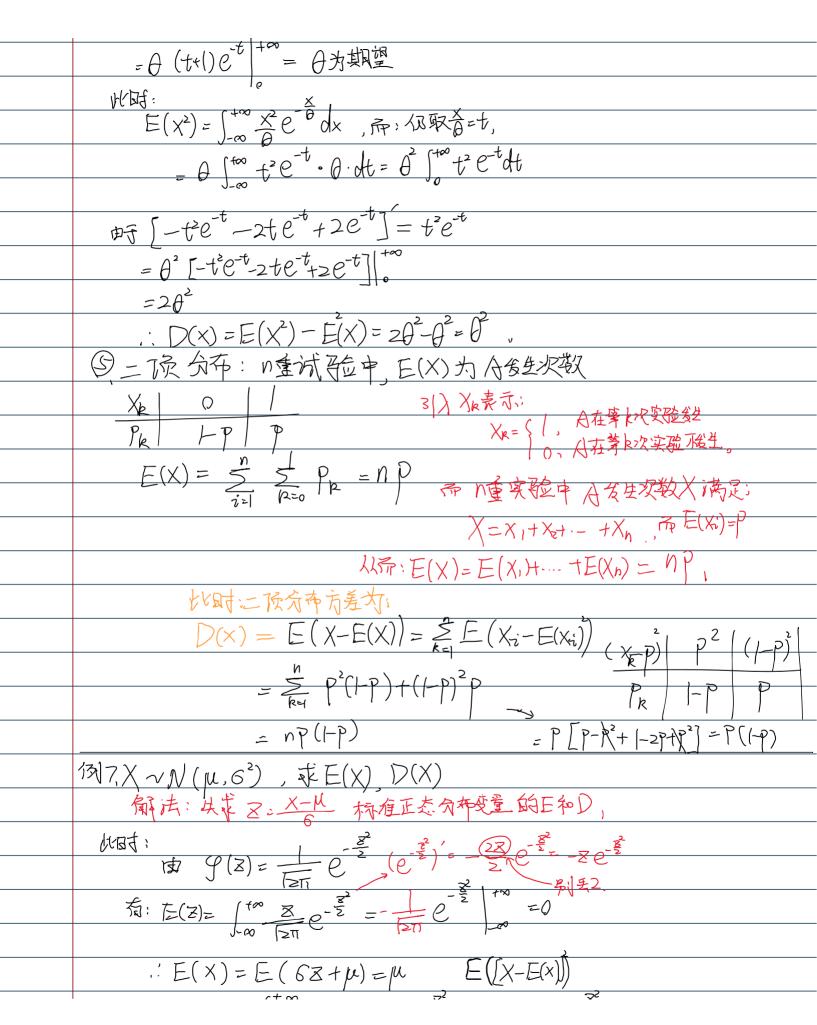
## 标准化变量以及常见分布方差

Thursday, December 7, 2023 11:37 AM

$\mathcal{Q}$	说连续型随机变量 X 有数学期望 E(X)=从, D(X)=62+0
	设 X*= XM
	$E(X^*) = \int_{-\infty}^{\infty} \underbrace{[X - \mu]_{(X)}} dx = \underbrace{\mu - \mu}_{\infty} \underbrace{f(x)}_{\infty} dx = 0,$
	$D(X^{*}) = \int_{-\infty}^{\infty} \left[ \frac{x - \mu}{6} - 0 \right]^{2} f(x) dx = \int_{-\infty}^{\infty} \left[ \frac{1 + \infty}{4 + \omega} (x - \mu)^{2} + \frac{1}{4 + \omega} (x - \mu$
	(说明:要用:XX-E(XX)代入)
	$\mathbb{F}: D(X) = \int_{-\infty}^{+\infty} (X + \mu)^2 f(X) dX = 6^2.$
	$\mathbb{A}^{1} \mathcal{D}(X) = \int_{-\infty}^{\infty} (A^{n}) f(X) dX = 0$
	DD(XX)=   一面和将 XX=XM 探为标准代变量
	准人变量
	包. 常见为布朗方差;
	1)对(0,1)分本,分本律X (
	P(X) 1-P P 2(12)
	国市有: E(X)= P
	$P(X) = (-P)(P) + (P) \cdot P = (PP)(P+P)$
	( ) kp-7
	$2)$ - 设 $X \sim \Pi(\lambda)$ , 求 $D(X)$ , 分布律: $P(x=k) = \{ \begin{cases} \lambda^k e^{-\lambda} \\ k! \end{cases}, k=1,2,$ 解: (泊松分布)
	解: (泊松分布)
	$E(x) = \frac{8}{3} \frac{\lambda^{R}}{R} = \frac{\lambda^{R}}{R} =$
	$E(x) = \sum_{k=1}^{\infty} \frac{1}{k!} e^{-x} k$ $R = \sum_{k=0}^{\infty} \frac{1}{(k-1)!} e^{-x} + \sum_{k=0}^{\infty} \frac{1}{(k-1)!} e^{-x} + \sum_{k=0}^{\infty} \frac{1}{(k-1)!} e^{-x}$ $R = \sum_{k=0}^{\infty} \frac{1}{(k-1)!} e^{-x} + \sum_{k=0}^{\infty} \frac{1}{(k-1)!} e^{-x} + \sum_{k=0}^{\infty} \frac{1}{(k-1)!} e^{-x}$
	我们考虑,用 D(X)=E(X)-E(X)证明:





 $E(X) = E(6Z + \mu) = \mu \qquad E([X - E(x)])$
 $\frac{1}{16} = \frac{1}{16} $
- ×   ZT   ZT
$=-\frac{1}{2\pi}\int_{-\infty}^{\infty} Z d\left(e^{-\frac{Z^2}{2}}\right) = 0 + \int_{-\infty}^{+\infty} \frac{1}{2\pi}e^{-\frac{Z}{2}}dz = \frac{1}{2\pi}X\sqrt{2\pi} =  z ^2$
有: D(X)=D[62+M]=D[62]=6° 显: E(X)=M, D(X)=6°.