

Hello Wolrd!

$$y=2x-1$$

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$$x^{2y}, x^{2y^x}, X_{n_1}^{2y^z}$$

$$X_{3m}^{2m}, X^{2n_3m}$$

$$X_n^2, X_n^2, X_{n^2}$$

$$2^{2^{2^{2^{2^{2^2}}}}}$$

$$f'(x) \quad f'''(x)|_{x=0}$$

$$\pi, \Phi, \Sigma, \mu, \alpha$$

$$\Gamma\Pi\Phi\hbox{는}\Gamma\Pi\Phi\hbox{와}\hbox{다르다}.$$

$$\dots\quad\hbox{는}\Psi\Theta\Omega\hbox{와}\hbox{다르다}.$$

$$\sqrt[x]{x}, \sqrt[3]{ax+b}, \sqrt[2]{5}, \sqrt{2}, \sqrt[x]{2}$$

$$\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+x}}}}}}} \tag{1}$$

$$\sqrt{a}\sqrt{d}\sqrt{g}$$

$$(x_1+\cdots+x_n)$$

$$(a_1,\ldots,a_m)$$

$$(a_1,\dot{,},a_n)$$

$$(a_1,\dot{\cdot\cdot\cdot},a_n)$$

$$\frac{x^2+1}{y_1^2-1}$$

$$1+\frac{1}{1+\frac{1}{1+\frac{1}{1+\frac{1}{1+x}}}}$$

$$\frac{1}{2}\;\frac{x}{2}$$

$$\mathcal{A}\otimes$$

$$\mathcal{A}\trianglelefteq$$

$$\mathcal{S}\text{를 } \mathcal{S}=\{A\mid A\ni\mathcal{T}\}\text{라 하자.}$$

$$\mathbb{A},\emptyset$$

$$\not\exists,\not\subset,\not\prec$$

$$\lim_{n\rightarrow\infty}$$

$$\liminf_{n\longrightarrow\infty}$$

$$\liminf_{n\rightarrow\infty}$$

$$a\bmod b\qquad y\pmod{a+b}$$

$$\int\int\cdots\int fdP$$

$$\int\!\!\int\cdots\!\!\int fdP$$

$$\int\!\!\int\cdots\!\!\int fdP$$

$$1/\log n$$

$$\sqrt{4}n$$

$$f(x;\mu,\sigma)=\frac{1}{\sqrt{2\pi}\sigma}\exp\Big\{-\frac{(x-\mu)^2}{2\sigma^2}\Big\}$$

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$$\sum_{i=1}^n x_i = \int_0^1 f$$

$$\frac{\sum_{i=1}^n x_i}{a-b} = \int_0^1 f$$

$$\frac{c+d}{a-b}$$

$$\frac{a-b}{c+d}$$

$$\vec{x}+\vec{y}=\left\{\begin{array}{c}a\\b\end{array}\right.$$

$$\mathbf{A} = \left(\begin{array}{ccc} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \\ a_{31} & a_{32} & a_{33} \end{array} \right)$$

$$\widehat{a-1} = \widetilde{x-y} + \widehat{\mathsf{Cov}}$$

$$\begin{array}{ccccc} a & & b & & c \\ a-b & & b-c & & c-a \\ x^2+2x+1 & x^2+2x+1 & x^2+2x+1 & & \end{array}$$

$$\begin{array}{c} a_{11}x_1+a_{12}x_2+\cdots+a_{1n}x_n=b_1 \\ a_{11}x_1+a_{12}x_2+\cdots+a_{1n}x_n=b_1 \\ \vdots \\ a_{11}x_1+a_{12}x_2+\cdots+a_{1n}x_n=b_1 \end{array} \tag{2}$$

$$\left(\begin{array}{c|cc|} & a & b & \\ & c & d & \\ & e & & \\ & f & & \end{array}\right)$$

$$x^n = \overbrace{x \times x \times \cdots \times x}$$

$$\overbrace{a+b+\overline{c+d}}+e$$

$$\overbrace{a+\underbrace{b+c+e}_{123}}^{ab}$$

$$\frac{p(x_i|\mathbf{x}_{-i})}{1-p(x_i|\mathbf{x}_{-i})} = \theta_1 \sum_{i=1}^m x_i + \beta_1 \sum_{\text{nbr}} x_i x_{i'} \tag{3}$$

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Test the above equation label in here (3).

$$(x+y)^2 \quad = \quad x^2 + xy + yx + y^2 \tag{5}$$

$$\begin{aligned} &= x^2 + xy + xy + y^2 \\ &= x^2 + 2xy + y^2 \end{aligned} \tag{6}$$

$$\begin{aligned}(x+y)^2 &= x^2+xy+yx+y^2 \\ &= x^2+2xy+y^2\end{aligned}\tag{7}$$

$$\begin{aligned}(x+y)^2 &= x^2+xy+yx+y^2 \\ &= x^2+2xy+y^2\end{aligned}$$

$$\begin{aligned}a+b+c+d+e+f+g+h+i+j+k+l=\\x+y+z+a+b+c+d+e+f+g+o+s+t+\\u+v+w\end{aligned}$$

Math italic *different* is from *different*.

$$f(x)=\left\{\begin{array}{ll}x& if\,x>2orif\,x<-2\\x& if\,x>2orif\,x<-2\\x& if\,x>2\,\,or\,\,if\,\,x<-2\end{array}\right.\tag{8}$$

$$\text{Form e}^{\text{pdf}}+\phi(\mathbf{x})$$

$$Form\;e^{pdf}+\phi(x)$$

$$\text{Form e}^{\text{pdf}}+\phi(\mathbf{x})$$

$$\mathbf{Form\;e}^{\mathbf{pdf}}+\phi(\mathbf{x})$$

$$\text{Form e}^{\text{pdf}}+\phi(\mathbf{x})$$

$$\mathcal{ABC}$$

$$\mathbf{a}=(a_1,a_2,\ldots,a_n)^T$$

$$\boldsymbol{a}=(\boldsymbol{a_1},\boldsymbol{a_2},\ldots,\boldsymbol{a_n})^T$$

$$\boldsymbol{a}\!=\!(a_1,a_2,\ldots,a_n)^T$$

$$\boldsymbol{a}=(a_1,a_2,\ldots,a_n)^T$$

$$\boldsymbol{a}\boldsymbol{X}+\boldsymbol{\beta}+\boldsymbol{\gamma}$$

$$\boldsymbol{a}\boldsymbol{X}+\boldsymbol{\beta}+\boldsymbol{\gamma}$$

$$A\overset{f}{\rightarrow}B\overset{g}{\rightarrow}C$$

$$AAAAA$$

$$\frac{a+b}{c-d}$$

$$\frac{a+b}{a+b}$$

$$1+\frac{1}{1+\frac{1}{1+\frac{1}{1+\frac{1}{1+x}}}}$$

$$1+\frac{1}{1+\frac{1}{1+\frac{1}{1+\frac{1}{1+\frac{1}{1+x}}}}}$$

$$\text{표준편차}=\sqrt{\text{분산}}=\sqrt{\frac{\text{편차}^2\text{의 합}}{\text{표본의 개수}-1}}\tag{9}$$

$$\int_0^\infty f(x)dx$$

$$\int\limits_0^\infty f(x)dx$$

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$$\inf\sup_{n\rightarrow\infty}f_n(x)$$

$$\infsup_{n\rightarrow\infty}f_n(x)$$

$$\overset{\text{woops}}{\infsup_{n\rightarrow\infty}f_n(x)}$$

$$\infsup_{n\rightarrow\infty}^{\text{woops}}f_n(x)$$

$$\binom{2n}{n},\,2n\mathbf{C}_n$$

$$\left(\begin{array}{c}2n\\n\end{array}\right)$$

$$\binom{2n}{n}$$

$$\left[\begin{array}{c} x \\ 2y \end{array} \right]$$

$$\left\{ \begin{array}{c} a-c \\ b \end{array} \right\}$$

$$^{231}_{73}\mathrm{U}$$

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$$x+\langle \begin{smallmatrix} a+b\\c\end{smallmatrix}\rangle$$

$$x+\uparrow \begin{smallmatrix} a+b\\c\end{smallmatrix} \downarrow$$

$$A=\begin{pmatrix}\lambda&l\\a&\alpha\end{pmatrix}$$

$$B=\begin{pmatrix}\lambda&1\\a&\alpha\end{pmatrix}$$

$$A=\begin{matrix}&n_1&n_2&n_3\\m_1&\left(\begin{matrix}A_{11}&A_{12}&A_{13}\end{matrix}\right)\\m_2&\left(\begin{matrix}A_{21}&A_{22}&A_{23}\end{matrix}\right)\end{matrix}$$

$$A=\begin{matrix}&n_1&n_2&n_3\\m_1&\left(\begin{matrix}A_{11}&A_{12}&A_{13}\end{matrix}\right)\\m_2&\left(\begin{matrix}A_{21}&A_{22}&A_{23}\end{matrix}\right)\end{matrix}$$

$$f(x)=\left\{\begin{array}{ll}x & \text{for } x>0 \\ -x & \text{for } -1<x\leq 0 \\ x^2 & \text{otherwise}\end{array}\right.$$

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$$\frac{a+b}{c+d}\,\frac{a+b}{c+d}$$

$$\{x\big|x\in X\}$$

$$\{x\mid x\in X\}$$

$$\{x\big|x\in X\}$$

$$\{x\big|x\in X\}$$

$$\left\{\left\{\left\{\left\{\left\{\right\}\right\}\right\}\right\}\right\}$$

$$|b=|x+y||$$

$$\left|b-|x+y|\right|$$

$$\frac{1}{\sqrt{2\pi}\sigma}\exp\{-\frac{(x-\mu)^2}{2\sigma^2}\}\text{ if }\mu=0,\sigma=1, \tag{10a}$$

$$\frac{1}{\sqrt{2\pi}\sigma}\exp\{-\frac{x^x}{2\sigma^2}\}\text{ if }\mu=0, \tag{10b}$$

$$\frac{1}{\sqrt{2\pi}}\exp\{-\frac{x^2}{2}\}\text{ if }\mu=0,\sigma=1. \tag{10c}$$

식 (10b)와 식 (10c)는 식 (10a)의 특별한 경우이다.
 ABCDER

MathfrackFont

$$\mathbb{R}\checkmark\blacklozenge$$

$$F\kappa\aleph\daleth$$

$$\lceil\rceil\lfloor\rfloor$$

$$\sum_{\substack{i=j\\i<k\\j\neq k}}x_{ij}^{j-k}$$

$$\iiint\limits_{\substack{x\in A\\y\in B\\c\ni z}}f(x,y,z)dx dy dz$$

$$\sum\limits^{m-n}_n x_{ij}$$

$$\begin{aligned} a&=d+e+f+g+h+i+j+k+l+m\\&\quad +q+r+s+t+u+v+w+x+y+x+z\\&+q+r+s+t+u+v+w+x+y+x+z\\&=e+f+g+h+i+j+k+l+m+z+y+x+m_2 \end{aligned}\tag{11}$$

$$\begin{aligned} a&=b+c+d+e\\&\quad -f+g+m\\&=x^2+y^2+z \end{aligned}\tag{12}$$

$$(x+y)^2 = x^2 + 2xy + y^2 \tag{13}$$

$$(x+y+z)^2 = x^2 + y^2 + z^2 + 2xy + 2yz + 2zx \tag{14}$$

$$(x+y)^2 = x^2 + 2xy + y^2 \tag{15}$$

$$(x+y+z)^2 = x^2 + y^2 + z^2 + 2xy + 2yz + 2zx \tag{16}$$

$$a_{11} = a_{12} \qquad \qquad \qquad a_{13} = a_{14} \qquad \qquad (17)$$

$$(x+y)^2 = (x+y)(x+y)x^2 + 2xy + y^2 = z^2 \qquad (18)$$

$$f(x) = \frac{1}{(1+x^2)} \qquad \qquad \qquad g(x) = \sqrt{2\pi} \qquad (19)$$

$$\begin{array}{lll} a = \alpha & & D = \Delta\Delta\Delta \\ b = \beta\beta & \text{versus} & e = \epsilon\epsilon \\ c = \gamma\gamma\gamma & & Z = \Omega \end{array} \qquad (20)$$

$$\begin{array}{lll} a = \alpha & & D = \Delta\Delta\Delta \\ b = \beta\beta & \text{versus} & e = \epsilon\epsilon \\ c = \gamma\gamma\gamma & & Z = \Omega \end{array} \qquad (21)$$