TeX으로 작성하는 수식

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아름다운 TeX 수식

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$$x^n + y^n = z^n \quad \ldots \textit{ NOT!}$$

The paper came out in the Annals of Mathematics last month; it arrived in our library and I saw it sitting there, and I looked at it and it was just wonderful for me because it was in TeX and it looked gorgeous! This to me was the . . . you know, it was so . . . I mean, I almost felt like I had helped to solve the Theorem myself!

결론부터 말씀드리자면,

- `usepackage{amsmath}`
- The TeXbook 18장 “Fine Points of Mathematics Typing”
- `texdoc mathmode`

And once you have gotten to that level, there’s only a little bit more to learn before you are producing formulas as beautiful as any the world has ever seen; tastefully applied touches of TeXnique will add a professional polish that works wonders for the appearance and readability of the books and papers that you type.

a, b, c, d, e, and f

```
$a, b, c, d, e, \textrm{and } f$
```

```
$a$, $b$, $c$, $d$, $e$, and $f$
```

수식에서 줄바꿈은 $=$, $<$, $\rightarrow$, $+$, $-$, $\times$ 와 같은 연산자 다음에서만.

$$f(x,y) = x^2 - y^2 = (x+y)(x-y)$$

$$f(x,y) = x^2 - y^2 = (x+y)(x-y)$$

```
$f(x,y) = {x^2-y^2} = {(x+y)(x-y)}$
```

```
\allowbreak
```

$$(x_1,\ldots,x_m,y_1,\ldots,y_n)$$

```
$(x_1,\ldots,x_m,\allowbreak y_1,\ldots,y_n)$
```

$$\iint_D dx\,dy$$

```
\int\int_D dxdy
```

$$\int\int_D dxdy$$

```
\int\!\!\!\int_D dx\,dy
\iint_D dx\,dy
```

$$\left(\frac{a^2}{b^3}\right)^4$$

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$$\left(\frac{a^2}{b^3}\right)^4$$
```

$$\left(\frac{a^2}{b^3}\right)^{\!\!4}$$

```
$$\left(\frac{a^2}{b^3}\right)^{\!\!4}$$
```

\,	thin space (normally $1/6$ of a quad);
\>	medium space (normally $2/9$ of a quad);
\;	thick space (normally $5/18$ of a quad);
\!	negative thin space (normally $-1/6$ of a quad).

`$\int_0^\infty f(x)\,dx$`	$\int_0^\infty f(x)\,dx$
`$y\,dx-x\,dy$`	$y\,dx-x\,dy$
`$dx\,dy=r\,dr\,d\theta$`	$dx\,dy=r\,dr\,d\theta$
`$x\,dy/dx$`	$x\,dy/dx$
`$(2n)!/\bigl(n!\,(n+1)!\bigr)$`	$(2n)!/\bigl(n!\,(n+1)!\bigr)$
`$\{1,2,\ldots,n\}$`	$\{1,2,\ldots,n\}$
`$\{\,x\mid x>5\,\}$`	$\{\,x\mid x>5\,\}$

`$\sqrt2\,x$`	$\sqrt{2}\,x$	
`$\sqrt{\,\log x}$`	$\sqrt{\,\log x}$	
`$O\bigl(1/\sqrt n\,\bigr)$`	$O\bigl(1/\sqrt{n}\,\bigr)$	
`$[\,0,1)$`	$[\,0,1)$	
`$\log n\,(\log\log n)^2$`	$\log n\,(\log\log n)^2$	
`$x^2\!/2$`	$x^2\!/2$	
`$n/\!\log n$`	$n/\!\log n$	
`$\Gamma_{\!2}+\Delta^{\!2}$`	$\Gamma_{\!2}+\Delta^{\!2}$	$\Gamma_2+\Delta^2$
`$R_i{}^j{}_{\!kl}$`	$R_i{}^j{}_{\!kl}$	$R_i{}^j{}_{kl}$

- \cdots ($\cdots$) $+$, $-$, $\times$, $=$, $\leq$, $\subset$ 사이에서.
- \ldots ($\ldots$) 콤마(,) 사이나 기호가 없을 때.

`$x_1+\cdots+x_n$`	$x_1+\cdots+x_n$
`$x_1=\cdots=x_n=0$`	$x_1=\cdots=x_n=0$
`$A_1\times\cdots\times A_n$`	$A_1\times\cdots\times A_n$
`$f(x_1,\ldots,x_n)$`	$f(x_1,\ldots,x_n)$
`$x_1x_2\ldots x_n$`	$x_1x_2\ldots x_n$
`$(1-x)(1-x^2)\ldots(1-x^n)$`	$(1-x)(1-x^2)\ldots(1-x^n)$

감사합니다.