Contents

LaTeX demo

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Graph$y = \frac{x}{3x^2+x+1}$ Something unimportant
the set of natural numbers is denoted by $\mathbb{N}$
the set of Integers is denoted by $\mathbb{Z}$
the set of real number is denoted by $\mathbb{R}$
This is Bo Li

Mention about the image file type
Suppose we are given a rectangle with side lengths $(x+1)$ and$(x+3)$
superscript: $2x^3$,next line:

$$2x^{34}$$

$$2x^{3x+4}$$

$$2x^{3x^2+4}$$

subscript:

$$x_1$$

$$x_{21}$$

$$x_{12}$$

$$x_{123}$$

Greek letters:

$$\pi$$

$$\alpha$$

$$A = \pi r^2$$

triangle letters:

$$y = \sin x$$

log function:

$$\log x$$

$$\log_5 x$$

$$\ln x$$

square roots:

$$\sqrt{2}$$

$$\sqrt[3]{2}$$

$$\sqrt{x^2 + y^2}$$

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

fraction:

about 2/3 of the glass is full 2/3 nothing changed

$$\frac{2}{3}$$

works

$$\frac{2}{3}$$

normal size

$$\frac{x+1}{x^2 + \sqrt{x}}$$

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

$$\frac{1 + \frac{2}{3}}{4}$$

$$\sqrt{\frac{x+1}{x^2+3}}$$

brackets:

$$(x+1)$$

$$[x+2]$$

$$\{x+3\}$$

$$\$12.55$$

$$3(\frac{2}{3})$$

$$3$$

parameters too small

$$3\left(\frac{2}{3}\right)$$

$$3\left[\frac{2}{3}\right]$$

$$3\left\{\frac{2}{3}\right\}$$

$$|x|$$

$$\left|\frac{x}{2+1}\right|$$

$$\{x^2\}$$

missing right curly parameter by using dot .

$$\{x^2$$

$$\left|\frac{dy}{dx}\right|_{x+1}$$

$$\frac{dy}{dx}\Big|_{x+1}$$

table:

x	1	2	3	4	5	6
$f(x)$	11	12	13	14	15	16

x	1	2	3	4	5	6
$f(x)$	11	12	13	14	15	16

x	1	2	3	4	5	6
$f(x)$	11	12	13	14	15	16

equation array with (sequence number)

$$5x^2 - 9 = x + 3 \tag{1}$$
$$x^4 = 4 + x \tag{2}$$
$$x + 4 = 3 \tag{3}$$
$$x \approx \pm 1.123 \tag{4}$$

equation array without sequence number

$$5x^2 - 9 = x + 3$$
$$x^4 = 4 + x$$
$$x + 4 = 3$$
$$x \approx \pm 1.123$$

equation array with sequence number and align by "="

$$5x^2 - 9 = x + 3 \tag{5}$$
$$x^4 = 4 + x \tag{6}$$
$$x + 4 = 3 \tag{7}$$
$$x \approx \pm 1.123 \tag{8}$$

list:

1. pencil
2. calculator
3. ruler
4. notebook
   (a) assessments
      i. quizzes
      ii. tests
   (b) homework
   (c) notes $\sigma\theta$
5. graph paper

- pencil
- calculator
- ruler
- notebook
  - assessments
    - quizzes
    - tests
  - homework
  - notes $\sigma\theta$
- graph paper

label right justified:

Commutative $a + b = b + a$

Associative $a + (b + c) = (a + b) + c$

Distributive $a(b + c) = ab + ac$

This will produce *italicized* text
This will produce **bold-faced** text
This will produce SMALL CAPS text
This will produce `typewriter` font
Please will my github at `http://www.github.com/RichardChangCA`.
please call me Lingfeng Zhang
please call me Lingfeng Zhang −− > large
please call me Lingfeng Zhang −− > Large
please call me Lingfeng Zhang −− > huge
please call me Lingfeng Zhang −− >Huge
please call me *Lingfeng Zhang* −− > small
please call me Lingfeng Zhang −− >tiny

This is center

this is left justified

1 Linear functions

1.1 matrix

1.2 vector

1.3 space

2 Quadratic functions

2.1 Standard form

Using structure and click these icons▽ II ⊙