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## LATEX Document Learning

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Hello, This my first LATEX document! The rectangle is of length (x+2) and (x+3). The Equation

$$A(x) = x^2 + 4x + 3$$

gives the area of rectangle

## Common mathmatical Notation

SuperScript

$$2x^3$$

$$2x^{34}$$

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

$$2x^{3x^{54}}$$

SubScripts

$$x_1$$

$$x_{12}$$

$$x_{1_{2_{3_4}}}$$

$$a_1, a_2, \dots a_{100}$$

Greek Letters

$$\pi$$

П

 $\alpha$ 

×

$$A = \pi r^2$$

Trignometry Function

$$y = \sin x$$

$$y = \cos x$$

$$y = \csc \theta$$
$$y = \sin^{-1} x$$
$$y = \arcsin x$$

 $\operatorname{Log}$  Function

$$y = \log x$$
$$y = \log_5 x$$
$$y = \ln x$$

Roots

$$\sqrt{2}$$

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

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

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

Fraction

About  $\frac{2}{3}$  of glass is full.

About  $\frac{2}{3}$  of glass is full.

About  $\frac{2}{3}$  of glass is full.

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

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

Brackets

States that a(b+c)=ab+ac, for all  $a,b,c\in\mathbb{R}$ 

Square a ,  $\left[a\right]$ 

Curly Bracket A,  $\{working\}$ 

Doller Sign \$

$$2\left(\frac{2}{1^{2-1}}\right)$$

$$2\left[\frac{2}{1^{2-1}}\right]$$

$$2\left\{\frac{2}{1^{2-1}}\right\}$$

$$2\left\langle\frac{2}{1^{2-1}}\right\rangle$$

$$2\left|\frac{2}{1^{2-1}}\right|$$

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

$$\left(\frac{1}{1+\left(\frac{1}{1+x}\right)}\right)$$

Tables

x	1	2	3	4	5
f(x)	10	11	12	14	15

x	1	2	3	4	5
f(x)	$\frac{1}{2}$	11	12	14	15

Table 1: these value f(x)

Arrays

$$5x^2 - 9 = x + 3 \tag{1}$$

$$5x^2 - 9 = x + 3 \tag{2}$$

$$5x^2 - 9 = x + 3$$

$$5x^2 - 9 = x + 3$$

$$5x^2 - 9 = x + 3 \tag{3}$$

$$5x^2 - 9 = x + 3 \tag{4}$$

Lists

- 1. nishu
- 2. deepak
- 3. neelam
  - (a) gla
  - (b) bank
- 4. last
- A. nishu
- B. deepak
- C. neelam

nishu

deepak

neelam

- nishu
- $\bullet$  deepak
- neelam
  - gla
  - bank
- last

Text and Document Formatting

this is a *test*this is a **test**this is a TEST
this is a **test**please visit google

i am nishant yadav

this is a center

this is a left

this is a right

- 1 Lists
- 1.1 learning
- 1.2 thinking
- 2 formatting
- 2.1 text
- 2.2 words