

My First L^AT_EX Attempt

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Part I

Test

Chapter 1

Second chapter

[YouTube](#)

1.1 Typesetting

Proof.

$$\hat{x} = y \tag{1.1}$$

$$\hat{x} = z \tag{1.2}$$

$$\therefore y = z. \tag{1.3}$$

□

1.1.1 Some math stuff

$$\tau \in \chi \tag{Math person}$$

$$e = m \cdot c^2$$

Math person Using `\smash{equation}` ignores that equations height for line-height.

$$\frac{d}{dx}f(x) = f'(x) = \lim_{h \rightarrow 0} \frac{f(x+h) - f(x)}{h} \tag{1.4}$$

$$x^2 \geq 0 \quad \forall (\text{for all}) \ x \in \mathbb{R} \tag{1.5}$$

The command `\text{text}` can be used to add normal text within equations.

Pi expression	Value
π	3.1416
π^π	36.46
$(\pi^\pi)^\pi$	80662.7

Table 1.1: Caption for π

$\binom{n}{k}$

$x\bar{y}z$

$x\vec{y}z$

$\overrightarrow{xy\dot{z}}$

(1.6)

$0.\overline{3}$

$\overset{\leftrightarrow}{\rightleftharpoons}$

$\overline{\overline{\overline{1/3}}}$

(1.7)

$\overbrace{\cdots\cdots\cdots\overset{\cdot}{\vdots}\cdots\cdots}^{dots}$

underneat

(1.8)

$\left(\left(\left[\int_{0\leq i\leq n}^n\right]\right)\right)$

$\int\int\int\int\int\int\int\int\int\int_{\mathbb{C}^n}$

$\{\{\{\{\{\}$

$\parallel\parallel\parallel\parallel\parallel\parallel\parallel\parallel\parallel\parallel$

$\Downarrow\Downarrow\Downarrow\Downarrow\Downarrow\Downarrow\Downarrow\Downarrow\Downarrow\Downarrow$

iv

$a = b + c + d$

Some notes

(1.9)

$= a + b + c$

Some more notes

(1.10)

$+ d + e$

(1.11)

$\mathbf{x} = \begin{bmatrix} x_0 & x_1 & \cdots \\ x_2 & x_3 & \cdots \\ \vdots & \vdots & \ddots \end{bmatrix}$

$\begin{matrix} 1 & 2 \\ 3 & 4 \end{matrix}$

$\begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$

1.2 Specialties

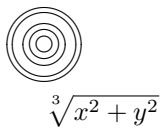
Hi [1] has said
Hi[2] has said
Hi [2] has said

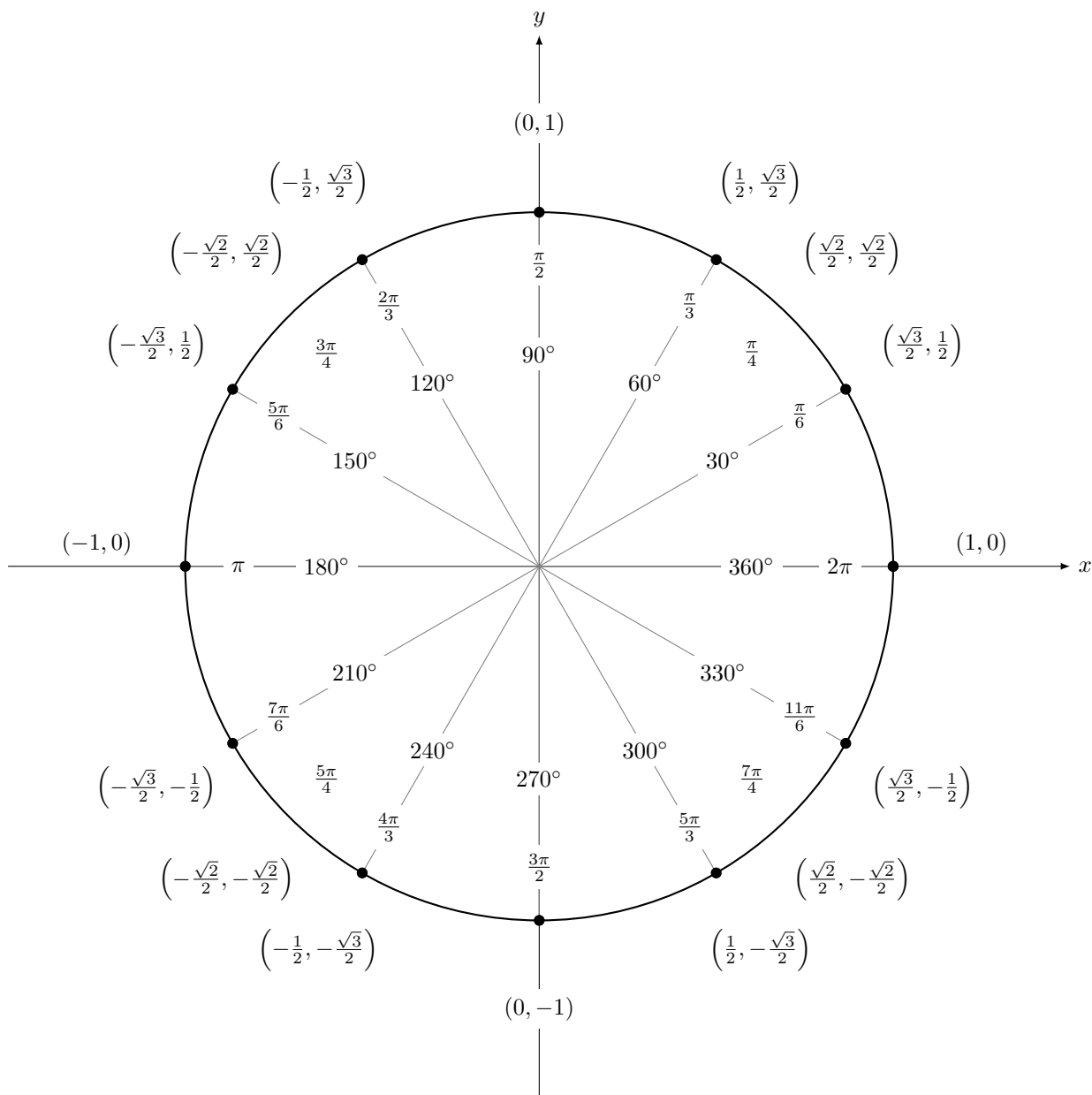
Bibliography

[1] Albert Einstein

[2] Trey Wilkinson

1.3 Producing Mathematical Graphics





Chapter 2

Last chapter

Part II

Math

Chapter 3

Logic

Chapter 4

Algebra

4.1 Algebra: 0

$I \rightarrow II \rightarrow III \rightarrow V \rightarrow VI \rightarrow VIII \rightarrow IX$
(Pass through IV and VII on first pass)

4.1.1 I. Preliminaries: Set theory and categories

4.1.2 II. Groups, first encounter

4.1.3 III. Rings and modules

4.1.4 VII. Fields

4.1.5 IX. Homological Algebra

Chapter 5

Analysis

5.1 Real Analysis

5.2 Complex Analysis

5.3 Functional Analysis

5.4 Tensor Analysis