

IMSP revision

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Contents

1	List	2
1.1	unordered list	2
1.2	ordered list	2
1.3	nested list	2
2	table	2
2.1	table environment	2
2.2	simple table using tabular	2
3	figure	2
4	code	3
4.1	single line	3
4.2	multiple-line codes	3
5	Font	3
6	math	3
6.1	simple inline math	3
6.2	display math	3
6.3	special characters	3
6.4	equation environment	3
6.5	eqnarray environment	3
6.6	align environment	3
6.7	matrix in parentheses()	4
6.8	matrix in brackets []	4
6.9	matrix in vertical lines	4
6.10	matrix using array environment	4

1 List

1.1 unordered list

- A
- B

1.2 ordered list

1. A
2. B

1.3 nested list

1. A
 - a
 - b
2. B
 - a
 - b

2 table

2.1 table environment

1	2	3	4
A	B	C	D

Table 1: Table1

2.2 simple table using tabular

1	2	3	4
A	B	C	D

3 figure

Important note:

- (a) `\usepackage{graphicx}` should be added to the preamble of your .tex source code.
- (b) The **.png** image file should be put into the same folder with your **.tex** source code.
- (c) Commonly used optional settings for adjusting the image size:

```
\includegraphics[scale=0.7]{image file name}  
\includegraphics[width=0.8\textwidth]{image file name}
```

Figure 1: Figure 1

4 code

4.1 single line

single-line program code or command

4.2 multiple-line codes

multiple-line program codes

5 Font

tiny>scriptsize>footnotesize>small

large<Large<LARGE<dhuge<Huge **boldface text**

italics text

underlined text

SMALLCAPS TEXT

teletype text

6 math

6.1 simple inline math

$$f(x) = x^2$$
$$\sqrt{1-2x} = 0 \Rightarrow x = \frac{1}{2}$$

6.2 display math

$$x_{n+1} = x_n - \frac{f(x_n)}{f'(x_n)}$$
$$(1+x)^n \approx 1 + nx + \frac{n(n-1)}{2}x^2$$

6.3 special characters

6.4 equation environment

$$\int_0^1 2x \, dx = [x^2]_0^1 = 1 \tag{1}$$

6.5 eqnarray environment

$$\frac{d}{dx}(\sin^{-1} x) = \frac{1}{\sqrt{1-x^2}} \tag{2}$$

$$\frac{d}{dx}(\cos^{-1} x) = \frac{-1}{\sqrt{1-x^2}} \tag{3}$$

$$\cos^2 \theta + \sin^2 \theta = 1 \tag{4}$$

$$\tan^2 \theta + 1 = \sec^2 \theta \tag{5}$$

6.6 align environment

$$\cos^2 \theta + \sin^2 \theta = 1 \tag{6}$$

$$\tan^2 \theta + 1 = \sec^2 \theta \tag{7}$$

6.7 matrix in parentheses()

$$\begin{pmatrix} a & b \\ c & d \end{pmatrix} \tag{8}$$

6.8 matrix in brackets []

$$\begin{bmatrix} a & b \\ c & d \end{bmatrix} \tag{9}$$

6.9 matrix in vertical lines

$$\begin{vmatrix} a & b \\ c & d \end{vmatrix} \tag{10}$$

6.10 matrix using array environment

$$\begin{pmatrix} a & b \\ c & d \end{pmatrix} \tag{11}$$