

# PRACTICE L<sup>A</sup>T<sub>E</sub>X

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## Contents

<b>1</b>	<b>Day One</b>	<b>1</b>
1.1	formulaes . . . . .	1
1.2	Greek letters . . . . .	1
1.3	Functions . . . . .	1
1.4	Fractions . . . . .	2
1.5	Tables . . . . .	2
<b>2</b>	<b>Day Two</b>	<b>2</b>
2.1	Lists . . . . .	2
2.2	formatting . . . . .	3
<b>3</b>	<b>Images</b>	<b>3</b>

## 1 Day One

### 1.1 formulaes

$$E = mc^2$$

$$2x^{34}$$

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

### 1.2 Greek letters

$$\pi$$

$$\Pi$$

$$\alpha$$

$$\omega$$

$$\pi r^2$$

### 1.3 Functions

$$y = mx + c$$

$$y = \sin^2(x)$$

$$\sqrt[4]{x+1}$$

$$\sqrt{16}$$

$$\sqrt[4]{1+\sqrt{x}}$$

1.4 Fractions

$$\frac{2x + 3}{\sqrt{5}}$$
$$\arctan x$$
$$\ln 15$$
$$\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

the fraction is  $\frac{3}{5}$  which means

$$a, b, c \in \mathbb{R}$$
$$\left| \frac{8}{1 + \frac{\sqrt{3}}{7}} \right|$$

1.5 Tables

$x$	1	2	3	4
$f(x)$	2	4	8	16

$x$	1	2	3	4
$f(x)$	$\frac{1}{x}$	4	8	16

Table 1: values for  $f(x) = x^x$

$$5x + 6 = 26 \tag{1}$$
$$5x = 26 - 6 \tag{2}$$
$$x = 4 \tag{3}$$

$$5x = 20$$

2 Day Two

2.1 Lists

- D. Books
- E. Pencils
- F. Pens
- G. Soap
- 1) Books
- 2) Pencils

- 3) Pens
  - 4) Soap
    - i. Books
    - ii. Pencils
    - iii. Pens
    - iv. Soap
  - 5) capial
- H. frista

## 2.2 formatting

This will produce *italicized* text  
 This will produce **bold face** text  
 This will produce SMALL CAPS text  
 This will produce **some code** text  
 Please visit my website [joelmwala.techfr](http://joelmwala.techfr)

## 3 Images

```
\documentclass[11px]{article}
\pagestyle{empty}
\usepackage{amsmath, amssymb}
\parindent 0px
\begin{document}

$$E = mc^2$$


$$2x^{34}$$


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


$$2x^{3^4+1}$$


$$H_{20}$$


$$4^{3^5}$$


$$a_1 + a_2 + \ldots + a_n$$

\end{document}
```