

Exercise 1

- Local Font Size

- Sizing changes can be contained in braces {}

* `\tiny`, `\scriptsize`, `\footnotesize`, `\small`

* `\large`, `\Large`, `\LARGE`, `\huge`, `\Huge`

· Example: `{\tiny hello}` → `hello`

- Text Styling

- Italics : `\textit{hello}` → *hello*

- Bold : `\textbf{hello}` → **hello**

- Underline : `\underline{hello}` → hello

Introduce yourself in the following format:

Hi, my name is [last name], [first name]. I am a [year name] in the graduating class of [year].

Exercise 2

- To go into **math mode**, type your math between a pair of dollar signs.

- It is also worthwhile to include `amsmath` and `amsmath` packages.

<code>\leq</code>	\leq	<code>\sum_{n=1}^{\infty}</code>	$\sum_{n=1}^{\infty}$
<code>\geq</code>	\geq	<code>\int_a^b</code>	\int_a^b
<code>x^2</code>	x^2	<code>\frac{a}{b}</code>	$\frac{a}{b}$
<code>A_1</code>	A_1	<code>\sqrt{x}</code>	\sqrt{x}
<code>\alpha</code>	α	<code>\pm</code>	\pm
<code>\mu</code>	μ	<code>\sin</code>	\sin

Try typing out the following math equations/expressions:

1) $y = mx + b$

2) $F_s = \mu_s N$

3) $a^2 + b^2 = c^2$

4) $\sin^2 x + \cos^2 x = 1$

5) $\int_a^a f(x) dx = 0$

6) $\sum_{n=1}^5 n = 15$

7) Challenge: $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

Exercise 3

```
\begin{equation}
  e^{i \pi} + 1 = 0
\end{equation}
```

Try using the `equation` environment to type out:

$$ax^2 + bx + c = 0 \tag{1}$$

Exercise 4

```
\begin{align}
  x + 2x + 3x &= 12 \\
  6x &= 12 \\
  x &= 2
\end{align}
```

Try using the `align` environment to type out:

$$a + 2a + 3b + 4b = 20 \tag{2}$$

$$3a + 3b + 4b = 20 \tag{3}$$

$$3a + 7b = 20 \tag{4}$$