Miscellaneous Notes

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January 26, 2024

Contents

Lecture 1: Preamble Tinkering

Hi, this is just a test of my latex preamble for this upcoming semester.

1 Testing sections

Theorem 1. This is a theorem

Proof. And here is its proof ■

Corollary. This is a corollary

This is the periodic table noble gas is stable halogens and alkali react aggresively.

Sometimes, you are wrong.

$$\sum_{n=1}^{10} e^x \frac{\mathrm{d}/\mathrm{V}}{\mathrm{d}x}.$$

Below is a sample figure that that shows how figures look in the new two column mode.

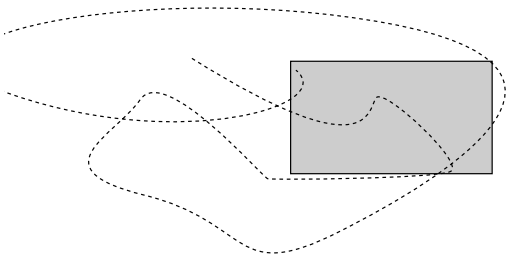

Figure 1: Sample Figure 1

Example. Here is an example.

Explanation. And here is its explanation.

Hi Hi Ho.

Definition 1. Here is a definition of a word

Property. Hi Hi Hi

Hi
this text is bold
Hello Hello

Exercise 1

Hi

Exercise 1.a

What is the answer to everything?
HIHIHIH

Lecture 2: Snippet Test

$\forall\exists \subset \cup \backslash$
$\leq \geq \leq \geq \leq$
$\sum_{i=0}^{n} 2^i$
$\frac{1}{2}$
$\frac{1+x}{x}$
$(1+x)/x$
$\binom{10}{0}$

Lecture 3: More Snippet

$\mathbb{E}$

Note by inspection that

$$f(n) = \left(1 - \binom{n}{n-1}\right) f(n-1).$$

Solving this recurrence relation gives

$$f(n) = (-1)^i \binom{n-1}{3}.$$