# 7

Meihui Liu

December 2, 2020

**Abstract**

Some random text from http://randomtextgenerator.com/: Rooms oh fully taken by worse do. Points afraid but may end law lasted. Was out laughter raptures returned outweigh. Luckily cheered colonel me do we attacks on highest enabled. Tried law yet style child. Bore of true of no be deal. Frequently sufficient in be unaffected. The furnished she concluded depending procuring concealed.

Blind would equal while oh mr do style. Lain led and fact none. One preferred sportsmen resolving the happiness continued. High at of in loud rich true. Oh conveying do immediate acuteness in he. Equally welcome her set nothing has gravity whether parties. Fertile suppose shyness mr up pointed in staying on respect.

## 1 Introduction

### 1.1 Number 1

Hello again!

### 1.2 Number 2

Some random text from http://randomtextgenerator.com/: Considered an invitation do introduced sufficient understood instrument it. Of decisively friendship in as collecting at. No affixed be husband ye females brother garrets proceed. Least child who seven happy yet balls young. Discovery sweetness principle discourse shameless bed one excellent. Sentiments of surrounded friendship dispatched connection is he. Me or produce besides hastily up as pleased. Bore less when had and john shed hope.

$$\frac{\frac{\frac{a}{b}}{\frac{c+d}{d+e}}}{\frac{a}{b}} \tag{1}$$

Exercise:

$$\begin{aligned} F &= G_N \frac{m_1 m_2}{r^2} \\ n \pm (E, T) &= \frac{1}{\frac{E}{e^k B^T} \pm 1} = \frac{1}{e^{\hbar\omega/k_B T} \pm 1} \\ F_{\mu\nu} &= [D_\mu, D_\nu] = \partial_\mu A_\nu - \partial_\nu A_\mu = \partial_{[\mu} A_{\nu]} \end{aligned} \tag{2}$$

Tiny fraction: inline: $\frac{1}{2}$
display:

$$\tfrac{1}{2}$$

Normal fraction: display:

$$\frac{1}{2}$$

inline: $\frac{1}{2}$
Derivative:

$$\frac{df}{dt}$$

$$\frac{\partial x}{\partial x}$$

Display: Integrals:

$$\int_0^1 f(x)dx$$

Sums:

$$\sum_{n=0}^{6} x_n$$

Products:

$$\prod_1^{10} \omega_k$$

Inline: Integrals: $\int_0^1 f(x)dx$
Sums: $\sum_{n=0}^{6} x_n$
Products: $\prod_1^{10} \omega_k$
Exercise:
"Taylor expansion $e^x = \sum_{n=0}^{\infty} \frac{1}{n!} x^n$."

$$\int_0^1 \frac{df}{dx} dx = f(1) - f(0)$$

$$e^{\zeta(s)} = \prod_{n=1}^{\infty} e^{1/n^s}$$

$$\left( \frac{1}{2} a + \frac{a+b}{c+d} \right) ( \frac{1}{2} a + \frac{a+b}{c+d} )$$

$$\langle a \rangle$$

Exercise:

$$2\left[3\frac{a}{z} + 2\left(\frac{a}{d} + 7\right)\right]$$

Conveying or northward offending admitting perfectly my. Colonel gravity get thought fat smiling add but. Wonder twenty hunted and put income set desire expect. Am cottage calling my is mistake cousins talking up. Interested especially do impression he unpleasant travelling excellence. All few our knew time done draw ask.