Part1.There are some equations and some websites.

> **Hello** *World*

1.1 Simple Equation

$$E = mc^2$$

$$f(a, b, c) = (a^2 + b^2 + c^2)^3$$

$$f(x) = \sqrt{1 + x} \quad (x \geq -1)$$

1.2 Calculus

$$\int u \frac{dv}{dx}, dx = uv - \int \frac{du}{dx} v, dx$$

1.3 Summation notation

$$\left(\sum_{k=1}^{n} a_k b_k \right)^2 \leq \left(\sum_{k=1}^{n} a_k^2 \right) \left(\sum_{k=1}^{n} b_k^2 \right)$$

1.4 Repeating fractions

$$\frac{1}{\left(\sqrt{\phi\sqrt{5}} - \phi\right) e^{\frac{2}{5}\pi}} = 1 + \cfrac{e^{-2\pi}}{1 + \cfrac{e^{-4\pi}}{1 + \cfrac{e^{-6\pi}}{1 + \cfrac{e^{-8\pi}}{1 + 1 + \cdots}}}}$$

1.6 Lorenz Equations

$$\begin{aligned} \dot{x} &= \sigma(y - x) \\ \dot{y} &= \rho x - y - xz \\ \dot{z} &= -\beta z + xy \end{aligned}$$

1.7 Maxwell's Equations

$$\begin{aligned} \nabla \times \mathbf{B} - \frac{1}{c}\frac{\partial \mathbf{E}}{\partial t} &= \frac{4\pi}{c}\mathbf{j} \\ \nabla \cdot \mathbf{E} &= 4\pi\rho \\ \nabla \times \mathbf{E} + \frac{1}{c}\frac{\partial \mathbf{B}}{\partial t} &= \mathbf{0} \\ \nabla \cdot \mathbf{B} &= 0 \end{aligned}$$

> These equations are quite cramped. We can add vertical spacing using (for example) [1em] after each line break (\). as you can see here:

$$\nabla \times \mathbf{B} - \frac{1}{c}\frac{\partial \mathbf{E}}{\partial t} = \frac{4\pi}{c}\mathbf{j}$$

$$\nabla \cdot \mathbf{E} = 4\pi\rho$$

$$\nabla \times \mathbf{E} + \frac{1}{c}\frac{\partial \mathbf{B}}{\partial t} = \mathbf{0}$$

$$\nabla \cdot \mathbf{B} = 0$$

1.8 Some Websites

> I get 10 times more traffic from Google than from Yahoo or MSN. **How about you?**

Part2.There are the examples of some programming language.

> 给出一些例子代码：

2.1 This is the C.

```c
#include <stdio.h>
int main(int argc, char const *argv[])
{
        puts("hello");
        return 0;
}
```

2.2 This is the Java.

```java
//package console;
public class Print {
        static void print(Object obj){
                System.out.println(obj);
        }
        public static void main(String[] args){
                print("Hello World");
        }
}
```

2.3 This is the MATLAB

```matlab
set(0,'DefaultFigureVisible','off')
```

```
ezplot('cos(x)');grid minor
print -dps main.ps
!main.ps
```

2.4 This is the Python

```
from turtle import *
from math import*
speed('fastest')
x=list(range(-50,50));
y=[]
for i in range(100):
    x[i]=x[i]/10
    y.append(sin(x[i]))
    x[i]=50*x[i]
    y[i]=100*y[i]
color('white')
setpos(x[0],y[0])
color('blue')
for i in range(1,100):
    setpos(x[i],y[i])
!main.ps
```

2.5 This is the short code in a sentence.

> Use the printf() function.

Part3.These are the origin three colors.

> 1. Red.波长大约为**630**到**750**纳米，类似于新鲜血液的颜色.
> 2. Green.大自然界中常见的颜色。植物的绿色来自于叶绿素.
> 3. Blue.是天空的颜色，象征虚空、无穷以及神圣的.

Part4.There are some sentences.

- Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Aliquam hendrerit mi posuere lectus. Vestibulum enim wisi,viverra nec, fringilla in, laoreet vitae, risus.
- Donec sit amet nisl. Aliquam semper ipsum sit amet velit. Suspendisse id sem consectetuer libero luctus adipiscing.

This is an example inline link. This link has no title attribute.

Part5.This is example for the picture