

Hello world. (Included so as to not offend the Computer gods.)

Ordinary text (that is non mathematical text) is just typed as usual ordinary text. But LaTeX will decide where the line breaks are.

A new paragraph is started by leaving one or more blank lines.

My name is

My major is

The basic quadratic equation is $ax^2 + bx + c = 0$.

This can be done in one line

$$ax^2 + bx + c = 0.$$

But it is usually easier to read your code if you make it look displayed

$$ax^2 + bx + c = 0.$$

(LaTeX will not care, but if you are looking at your code a month after writing it you will.)

Let us give a slightly more complicated displayed equation which gives a good idea of what general LaTeX looks like:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}.$$

A basic formula in much of analysis is the sum of a geometric series

$$\frac{a}{1-r} = a + ar + ar^2 + ar^3 + ar^4 + \cdots = \sum_{n=0}^{\infty} ar^n$$

which converges for $|r| < 1$. Thus if

$$S = 3 + 3x + 3x^2 + 2x^3 + \cdots = \sum_{n=0}^{\infty} 3x^n$$

we have

$$S =$$