Sample portfolio entry

Your Name Here

September 14, 2018

If you want to write something you can just type like this. LaTeX will automatically indent and space as appropriate to the document. Quotes are tricky; some programs will automatically replace regular quotation marks with the correct symbols, but it looks like the online editors aren't doing that. Instead you'll have to use the single quote (twice) at the upper left of the keyboard to open a quotation: "It is required to find the Fluxion of a + x + y - z" (from l'Hospital's **Treatise on Fluxions**).

If you want a new paragraph, you'll need to skip a line. You can put each sentence on its own line and put as many spaces in as you want: LATEX ignores most whitespace.

Definition 1. A definition could go here if you wanted.

Right now Definition 1 isn't really a definition. But we can still talk about it using the ref command and the reference is a link to the definition (which is useful for bigger documents). You can also produce links like this: http://web02.gonzaga.edu/faculty/axon/301/portfolio.html.

Proposition 1. The equation $x^2 - 4y - 2 = 0$ has no integer solutions.

You may want to include some discussion before beginning the proof. For example, Proposition 1 translated into symbols is

$$(\forall x \in \mathbb{Z})(\forall y \in \mathbb{Z})[x^2 - 4y - 2 \neq 0].$$

Proof. Suppose (by way of contradiction) the equation $x^2-4y-2=0$ has an integer solution. Let $a,b \in \mathbb{Z}$ be that solution. Hence $a^2-4b-2=0$. Consequently $a^2=4b+2=2(2b+1)$. Thus a^2 is even. It then follows from earlier work that a is even. By definition (of even) there is an integer c such that a=2c. Hence $a^2=(2c)^2=4c^2=2(2b+1)$. Dividing by 2 shows that 2c=2b+1. This is a problem because 2c is even but 2b+1 is odd. We have reached a contradiction; our starting assumption must have been false. Therefore the equation $x^2-4y-2=0$ has no integer solutions.