This is the body of the document. I can put math, like $e^{i\pi} + 1 = 0$, into the text, or I can set it apart like so:

$$Q = \left\{ \frac{p}{q} \mid p, q \in \mathbb{Z} \right\}$$  \hspace{1cm} (1)

You can use labels to reference numbered lines. For example, the definition for rational numbers can be found in equation 1. This keeps track of these numbers even if you add more numbered lines in a different part of the document. You will have to compile more than once to make sure the references can catch all of the labels.

Suppose you want to prove something. There’s an environment for that:

Proof. Here is an example of one such environment. Thus, there is an environment for proving things.

Hooray!

To complete this assignment, change “your name” to your actual name, then compile, making sure the reference shows up correctly. Then submit this online to show that you are able to compile a \LaTeX document, thus able to complete future homework for online submission.

You are also encouraged to change the body of this document however you want and play around with things. Just make sure there is at least one labeled and referenced equation, and that your name is printed by \texttt{maketitle}. 