LaTeX ASSIGNMENT

DUE WEDNESDAY FEBRUARY 14, IN CLASS

Your first assignment is to learn to use the typesetting package LaTeX. It is way cooler than a word processor in that it uses more sophisticated algorithms to display your text on the page. It also lets you easily insert math such as $x^2 = \sqrt{y^3 - 4}$ into your work. Your first step is to find a computer that already has LaTeX installed on it, or install it on your own computer. For instructions on how to install LaTeX follow this link.

Using LaTeX is like using computer code. You will write your document in a text editor or LaTeX editor and then you must run the typesetter program to produce your finished document. Your finished document will either be a postscript or a pdf file. You must submit a printed copy this postscript or pfd **AND a printed copy of the .tex file (called the 'source').**

Your goal is to take the file template.tex (found on my webpage) and modify it to include:

(1) Your name
(2) A title
(3) Two sections
(4) A definition (in the definition environment, i.e., using the command `\begin{definition} ... \end{definition}`)
(5) A theorem (in the theorem environment)
(6) A proof (in the proof environment)
(7) Two equations (at least) including a fraction, an exponent, subscripts, and a Greek letter, one of which has multiple lines using the `\begin{align*}...\end{align*}` environment.
(8) A sentence which contains mathematics.

The goal here is not so much to do any math as it is to get ready to type it up. Your theorem and proof need not be an actual theorem and proof – the point is just to use the theorem and proof environments. Your theorem could be as simple as the statement 'This is a theorem' and your proof could be 'This is a proof.' However you must include the equations and symbols. Feel free to reproduce the example below.

MY FIRST LaTeX ASSIGNMENT

YOUR NAME

1. My theorem, my proof and my definition

Theorem 1.1. *This is my theorem.*

Proof. This is my proof and it contains mathematics such as $e^{3x+4} = \epsilon$. □

Definition 1.2. This is my definition.

2. My equations

$$\frac{ax + by}{c} = d^{2x}$$

$$\begin{aligned} \alpha &= a_1 + b_2 \\ &= e^r \\ &= \beta + \gamma - \psi \end{aligned}$$