

MATH 321 LATEX SAMPLE DOCUMENT

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Here is some sample text to show you what LaTeX does.

To start a new paragraph, you need to leave a line of white space in your tex file.

To include math, you have two options. The first is called “in line,” and you do this by putting your math between two dollar signs (\$). For example, Fermat’s Little Theorem tells us that if p is a prime and a is an integer such that $p \nmid a$, then $a^{p-1} \equiv 1 \pmod{p}$. Note that the exponent on a has to go in braces (in the tex file).

But if you really want an equation (or congruence) to stand out, then you “display” the math. It looks like this:

$$a^{p-1} \equiv 1 \pmod{p}.$$

Nice, right? Finally, we can make things look really nice for homeworks as follows:

Problem 1. *Let X and Y be blah blah blah ...*

Problem 2. *Let X and Y be as in the previous problem. What is Z ?*

Notice that LaTeX automatically numbers the problems for us.

Here is an Integral

$$\int_a^b x^2 dx$$

Sum $\sum_{n=1}^{\infty} 2^{-n} = 1$ inside text

Product $\prod_{i=a}^b f(i)$ inside text

$$\prod_{i=a}^b f(i)$$