Mood} We want to prove \$Pr{(X>0)} \* \mathbb{E}[X^2] \geq \mathbb{E}[X]^ fty}  $p_k \sum_{k=0}^{\infty} k^2 p_k \ \geq (\sum_{k=0}^{\infty} k p_k$ fty} p k  $(0^2 p 0 + \sum_{k=1}^{\infty} {\inf y} k^2 p_k) & \gcd (0 p_0 + \sum_{k=1}^{\infty} {\inf y} k^2 p_k)$ fty} k p k)^2 \\ \sum  $\{k=1\}^{\left(\inf ty\right)} p k$  \sum  $\{k=1\}^{\left(\inf ty\right)} k^2 p k$ nfty k p k )^2 \\ (\sum {k=1}^{\infty} p k)^{\frac{1}{2}} (\sum {k=1}  $\{1\}\{2\}\}$  &  $\sqrt{geq \sum \{k=1\}^{\pi}}$  By Cauchyy must be true. QED. First, we prove that \$x s\$ is a integer. We start  $\kappa$  s\$. \begin{align\*} x s &= \frac{1}{a} - \frac{1}{a}(1-ax 1)^s\\ &=\ \end{align\*} pand \$(1-ax 1)^5\$. Note the terms of the expanded binomial  $1 - [1 + \sum_{k=1}^{s} \sum_{k=1}^{k} 1^{k-s} (-ax 1)^{s}) \\ &= \frac{1}{a}$  $\binom{s}{k} (-ax 1)^s) \ \end{align*} Note that $(\sum {k=1}^{s} \binom{s}$ still a. Thus, when distributing \$\frac{1}{a}\$ to each of the terms in t \$ax s \equiv 1 (mod(m^s))\$. We start with the following given informati )  $\overline{R}$ ightarrow m | ax 1-1  $\overline{R}$ ightarrow m | 1-ax 1  $\overline{R}$ ightarrow m^5 | (1-ax 5 | -(1-ax 1)^5 \$\$ \$\$ \Rightarrow 1 - (1-ax 1)^s \equiv 1 (mod(m^5)) \F od(m^5))\$\$ \section\*{Notes for My Paper} Don't forget to include example They lo

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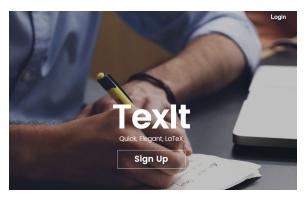
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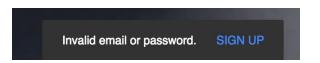
\$. Let 1{E}[X^2 fty} k p k )^2 \\ \sum  $\{k=1\}^{\left\{\inf y\right\}}$  p k \sum  $\{k=1\}^{\left\{\inf y\right\}}$  k^2 p k  $f(x) = \frac{k-1}^{(\int k p_k)^2 (\sum_{k=1}^{(\inf y) p_k)^{(f(x) \{k=1\}})}}{(\sum_{k=1}^{(\inf y) p_k)^2 (\sum_{k=1}^{(\inf y) p_k)^2}}}$ 2}} &  $\sqrt{geq} \sum {k=1}^{{\inf y}} k p k / {\text{Substitute } a i = } \sqrt{r}$  $\{1\}\{2\}\}$  &  $\sqrt{geq \sum_{k=1}^{\infty}} \sqrt{\inf y}$  a i b i \\ \end{align\*} By Cauchyy must be true. QED. First, we prove that \$x\_s\$ is a integer. We start  $\kappa$  s\$. \begin{align\*} x s &= \frac{1}{a} - \frac{1}{a}(1-ax 1)^s\\ &=\ \end{align\*} pand \$(1-ax 1)^5\$. Note the terms of the expanded binomial  $l - [1 + \sum_{k=1}^{s} \sum_{s} 1^{k-s} (-ax_1)^s]) \\ &= \frac{1}{a}$  $\binom{s}{k} (-ax 1)^s) \ \end{align*} Note that $(\sum {k=1}^{s} \binom{s} \end{align*}$ still a. Thus, when distributing \$\frac{1}{a}\$ to each of the terms in t \$ax s \equiv 1 (mod(m^s))\$. We start with the following given informati ) \Rightarrow m | ax 1-1 \Rightarrow m | 1-ax 1 \Rightarrow m^5 | (1-ax  $5 \mid -(1-ax 1)^5$  \$\$ \$\$ \Rightarrow 1 - (1-ax 1)^s \equiv 1 (mod(m^5)) \F od(m^5))\$\$\section\*{Notes for My Paper} Don't forget to include example They look like this: {\small \enumsentence{Topicalization from sententi chn\$\_i\$ [a & kltukl & [el & {\bf l-}oltoir & er & ngii\$\_i\$ & a Mary]]} {



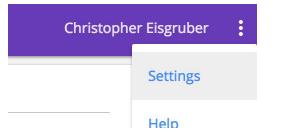
Landing Page



Sign up and login boxes



Error handling



Settings page



Account info on settings page

## Creating your account

Texlt makes it easy for you to create and manage your account.

#### **Account Creation**

To create an account, you will need a valid email. Use this email to log in, along with your chosen password. Currently, we do not support changing passwords. Passwords must be between 3 and 40 characters.

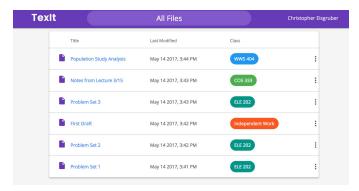
#### **Using Your Account**

After you login, you will see your name in the page header. By clicking on your name, or choosing "Settings" from the main menu (the dots on the top right of the header), you can see the rest of your account information.

Your account is used to keep all your uploaded files together, along with the classes you use to keep them organized.

#### **Learning More**

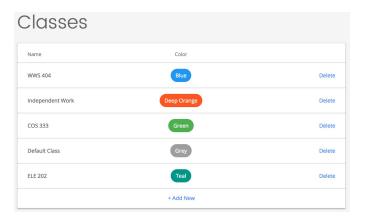
Also in the top menu, you'll see the options to be taken to a help page, for information about using our service, and an about page, where you can find information about the service and the people behind it.



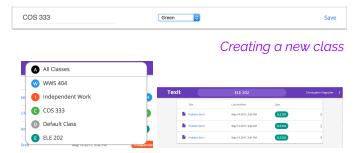
Main files page



Upload form



List of classes on settings page



Sorting by class

# Managing your files

You can get started right away by uploading images and organizing your files.

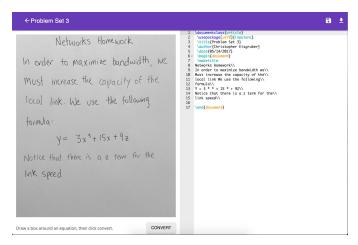
#### Uploading

Click the blue button at the bottom right of the main page (click on the **TexIt** logo in the top left to get to the main page). In this form, you can create a title, select a class, and choose an image file to upload. We support .png and .jpg images, and recommend images no larger than 3200x3200 pixels.

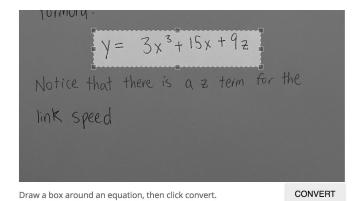
### Organizing

Your files are all found on the main page. You can click on any one to view it's contents. The lefthand menu of each file allows you to delete the individual files.

Files can be sorted by "class". You can think of classes like folders, with assignments grouped together. From the settings page, it's easy to view, create, and delete classes (Be careful! Deleting a class also deletes the associated files). You must always have at least one class. When adding or removing classes, you may need to reload the page to see your changes.



Working with a single file



Selecting an equation

```
\documentclass{article}
2
     \usepackage[utf8]{inputenc}
3
     \title{Problem Set 3}
4
     \author{Christopher Eisgruber}
5
     \date{05/14/2017}
6 - \begin{document}
    \maketitle
8
    Networks Homework\\
    In order to maximize bandwidth we\\
10
    Must increase the capacity of the\\
11
   local link We use the following\\
12
    formula\\
    $$ y = 3x ^{3} + 15x + 9z $$
14
    Notice that there is a z term for the \\
15
    link speed\\
16
   \end{document}
17
```

Working with your files

When you upload a new file, or select one of your existing files, you can see and work with it's contents. Each file contains your original image and the LaTeX we pulled from it.

#### Viewing a file

When you look at the contents of a file, you'll see two panes. The left-hand pane is the image you uploaded and the right-hand pane is the LaTeX code for the text that your image contained.

The right hand view is a real code editor, with built-in LaTeX syntax highlighting. Go ahead, try it!

#### Equations

If part of your image contains equations, formulas, or other "math" content, you can convert these sections into LaTeX individually by clicking a dragging to create a box around the line in question, then clicking the convert button. The equation will then appear at the top of the content section of your code, and you can move it to the appropriate place in your document.

#### Saving and Downloading

In the header, you'll see two icons. Click the icon to save the updated code to your files. Click

the icon to download a .txt file with all your code in it.