A Note on Figures and Citations

Figures

In this document, we show how to put multiple graphs in a single figure.

To be specific, suppose I have the following graphs from Maple:

```
plot(x^2,x=-3..3);
plot(cos(x),x=0..3*Pi);
```

Right click the mouse on the graph, and choose `Export`, then choose JPG. Save your graph in the same folder as your LaTeX file.

In LaTeX, here is the command to have two graphs show up in one figure (I have my figures saved as `Plot01.jpg` and `Plot02.jpg`, and they are both in the same directory as my tex file).

Here is the command to put two graphs side by side:

```
\begin{figure}[h]
\centering
\includegraphics[width=2.0in]{Plot01}\qquad
\includegraphics[width=2.0in]{Plot02}
\caption{This is a caption for the figure.}
\label{LabelForGraph01}
\end{figure}
```

And the result is Figure 1. The `h` in the top line tells LaTeX that you'd like the figure "here". Other options are T (for top) and B (for bottom). Please do not try to force where the figure appears- Let LaTeX figure it out automatically.
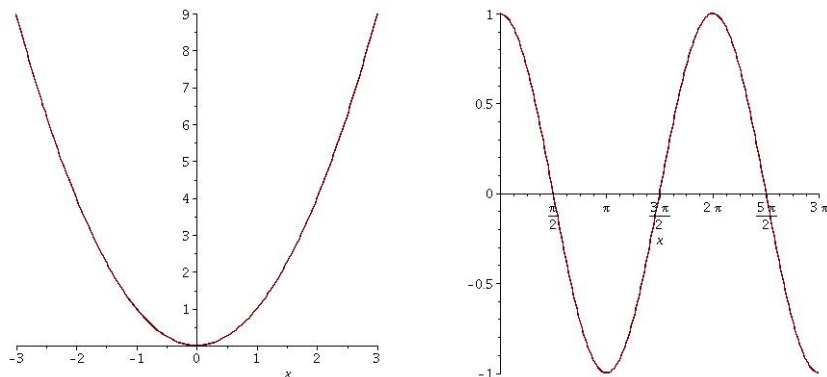

Figure 1: This is a caption for the figure.

Citations and Bibliography

It is very important to always cite your sources. We create the bibliography at the end of the document, and create labels for reference. In this example, I have three texts in my bibliography, and the third one is labeled by `Erdos01`. When I cite that reference, it looks like this:

`This is obvious \cite{Erdos01}.`

Which results in: This is obvious [1]. If you see a question mark for the citation, run LaTeX again. In place of references in your document, you'll have:

```
  \begin{thebibliography}{9}

\bibitem{Erdos01} P. Erd\H os, \emph{A selection of problems and
results in combinatorics}, Recent trends in combinatorics (Matrahaza,
1995), Cambridge Univ. Press, Cambridge, 2001, pp. 1--6.

\bibitem{Knuth92} D.E. Knuth, \emph{Two notes on notation}, Amer.
Math. Monthly \textbf{99} (1992), 403--422.

\bibitem{DRH} D. Hundley, \url{http://www.whitman.edu/~hundledr}, Retrieved
Feb 28, 2017.

\end{thebibliography}
```

If you're interested in managing a large bibliography, look up the use of "BibTeX". We will typically have 1 or 2 references, so the technique shown here is fine.

A Note About URLs

If you're going to reference something online, use the `url` package in LaTeX (remember to put it at the top, along with `graphicx` and `fullpage`). Then you use the `url` command as we did in the bibliography above.

References

[1] P. Erdős, *A selection of problems and results in combinatorics*, Recent trends in combinatorics (Matrahaza, 1995), Cambridge Univ. Press, Cambridge, 2001, pp. 1–6.

[2] D.E. Knuth, *Two notes on notation*, Amer. Math. Monthly **99** (1992), 403–422.

[3] D. Hundley, `https://www.whitman.edu/~hundledr`, Retrieved Feb 28, 2017.