TITLE - SAMPLE LaTeX FILE

YOUR NAME GOES HERE

ABSTRACT. You should include a short abstract describing the contents of your paper. Avoid specific references from the paper itself - the abstract should be written so that it could stand alone from your paper.

1. INTRODUCTION

You should begin your paper with an introduction that provides the background and definitions needed for your topic. A sample image is given below in Figure 1. Note that the pdf file begin references must be in the same folder on your computer as the tex file, otherwise it will not compile correctly.
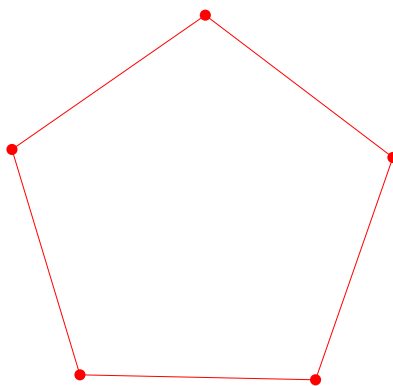
FIGURE 1. This is how you put in a caption for an image.

2. THEOREM ENVIRONMENTS

Theorem 1 (Ramsey, 1930)**.** *This is how you create a theorem. The reference next to the Theorem name can be left out.*

Proof. This is how you can create a proof environment. □

In the tex file, note that a label was added within the above theorem environment. This is so that you can refer to Theorem 1 and if you add more theorems to the paper, they will automatically be

renumbered. The same is true for references. You may refer to [5]. It may be necessary to compile the tex file twice before the labels show up. All sources used in your paper should be listed as in the samples below. The first, second, and fifth references are articles, while the third and fourth are books.

Here is a sample of a math environment: $\sqrt[4]{14}$. Use double $ if you wish to have a math environment centered on a line by itself:

$$\int_{1}^{\infty} e^{-x}\ dx.$$

If you would like to have an equation be numbered, use the following:

$$4x^5 + 3y^7 = 85. \tag{1}$$

You can then refer label in the equation. Eg., equation (1) pulls up the correct number.

Equations, inequalities, etc... can be aligned using the following commands:

$$\begin{aligned}
\delta(H) &= n - (r-1) - \Delta(\overline{H}) \\
&\geq n - (r-1) - (m+2) \\
&\geq n - m - r - 1 \tag{2}
\end{aligned}$$

As with the equation environment, each line that has \notag will not be labelled, and putting a label allows you to refer to property (2).

Matrices can be created using the array command:

$$\begin{pmatrix} -2 & 3 & -7 \\ 2 & 0 & 4 \end{pmatrix}$$

References

1. V. Chvátal, *Tree-complete Graph Ramsey Numbers,* J. Graph Theory **1** (1977), 93.
2. V. Chvátal and F. Harary, *Generalized Ramsey Theory for Graphs III. Small Off-diagonal Numbers,* Pacific J. Math. **41** (1972), 335-345.
3. K. Ireland and M. Rosen, "A Classical Introduction to Modern Number Theory," 2nd edition, Springer-Verlag, 1990.
4. G. Janusz, "Algebraic Number Fields," 2nd edition, Graduate Studies in Mathematics **7**, American Mathematical Society, Providence, RI, 1996.
5. F. Ramsey, *On a Problem of Formal Logic,* Proc. London Math. Soc. **30** (1930), 264-286.