## Sample Article Title

## **Diana Prince and Bruce Wayne**

Abstract. Abstracts for articles or notes should entice the prospective reader into exploring the subject of the paper and should make it clear to the reader why this paper is interesting and important. The abstract should highlight the concepts of the paper rather than summarize the mechanics. The abstract is the first impression of the paper, not a technical summary of the paper. Excessive use of notation is discouraged as it can limit the interest of the broad readership of the MAA, and can limit search-ability of the article.

The American Mathematical Monthly style incorporates the following LATEX packages. These styles should *not* be included in the document header.

- times
- pifont
- graphicx (this package is included in the MONTHLY TEX style file and might cause errors or conflicts when compiling your document. If you remove it, it should compile just fine.)
- color
- AMS styles: amsmath, amsthm, amsfonts, amssymb

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Use of other LATEX packages should be minimized as much as possible. Math notation, like  $c = \sqrt{a^2 + b^2}$ , can be left in T<sub>F</sub>X's default Computer Modern typefaces for manuscript preparation; or, if you have the appropriate fonts installed, the mathtime or mtpro packages may be used, which will better approximate the finished article.

Web links can be embedded using the \url{...} command, which will result in something like http://www.maa.org. These links will be active and stylized in the online publication.

1. FIRST-LEVEL SECTION HEADING. Section headings use an initial capital letter on the first word, with subsequent words lowercase. In general, the style of the journal is to leave all section headings unnumbered. Consult the journal editor if you wish to depart from this and other conventions.

**Second-level heading.** The same goes for second-level headings. It is not necessary to add font commands to make the math within heads bold and sans serif; this change will occur automatically when the production style is applied.

- 2. GRAPHICS. Figures for the MONTHLY can be submitted as either color or black & white graphics. If color graphics are included with the submission, they will be used for the online publication, and converted to black & white images for the print journal. We recommend using whatever graphics program you are most comfortable with, so long as the submitted graphic is provided as a separate file using a standard file format. For best results, please follow the following guidelines:
  - 1. Bitmapped file formats—preferably TIFF or JPEG, but not BMP—are appropriate for photographs, using a resolution of at least 300 dpi at the final scaled size of the image.

- 2. Line art will reproduce best if provided in vector form, preferably EPS or SV. The thinnest line weight should be .5 pt. Labels on a figure should be 9 pt in the same font style (italic, bold, etc.) as in the text.
- Alternatively, both photographs and line art can be provided as PDF files. Note that creating a PDF does not affect whether the graphic is a bitmap or vector; saving a scanned piece of line art as PDF does not convert it to scalable line art.
- 4. If you generating graphics using a TEX package, please be sure to provide a PDF of the manuscript with the TEX file of the graphic. In the production process, TEX-generated graphics will eventually be converted to more conventional graphics so the MONTHLY can be delivered in e-reader formats.
- 5. For photos of contributing authors, we prefer photos that are not cropped tight to the author's profile, so that production staff can crop the head shot to an equal height and width. If possible, avoid photographs that have excess shadows or glare.
- **3. TABLES.** Table for the MONTHLY should be set in an "open" style: rules above and below the heading and a rule to end the table. Note the use of \abrule and \brule to improve spacing in the table.

Table 1. Sample table

Under	$\pi(x) = \#\{\text{primes} \le x\} =$	$= \operatorname{Li}(x) \pm \operatorname{Error}$
500000	41556	41606.4 - 50.4
1000000	78501	79627.5 - 126.5
1500000	114112	114263.1 - 151.1
2000000	148883	149054.8 - 171.8
2500000	183016	183245.0 - 229.0
3000000	216745	216970.6 - 225.6

**4. THEOREMS, DEFINITIONS, PROOFS, AND ALL THAT.** Following the defaults of the amsthm package, styling is provided for theorem, definition, and remark styles, although the latter two use the same styling.

**Theorem 1 (Pythagorean Theorem).** Theorems, lemmas, axioms, and the like are stylized using italicized text. These environments can be numbered or unnumbered, at the author's discretion.

*Proof.* Proofs set in roman (upright) text, and conclude with an "end of proof" (q.e.d.) symbol that is set automatically when you end the proof environment. When the proof ends with an equation or other non-text element, you need to add \qedhere to the element to set the end of proof symbol; see the amsthm package documentation for more details.

**Definition (Secant Line).** Definitions, remarks, and notation are stylized as roman text. They are typically unnumbered, but there are no hard-and-fast rules about numbering.

**Remark.** Remarks stylize the same as definitions.

5. WEB SUPPLEMENTS. Web supplements are encouraged to enhance articles. Please keep PDFs to 20 pages long. Mathematica Notebooks, programing language, gifs, websites, and anything that will enhace or engage MONTHLY's readers is encouraged.

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## REFERENCES

- 1. Hopkins, B. Ed. (2009). Resources for Teaching Discrete Mathematics. Washington DC: Mathematical Association of America.
- Parker, A. (2013). Who solved the Bernoulli equation and how did they do it? Coll. Math. J. 44(2): 89-97. doi.org/10.4169/college.math.j.44.2.089.

DIANA PRINCE received her PhD in mathematics and political science from Johns Hopkins University. She joined the military as a United States intelligence officer before beginning her career as a mathematician. After leaving the United States military, she joined the faculty at Princeton University to teach mathematics and continue her reasearch in topology.

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