Information for Authors The College Mathematics Journal

About the journal

The College Mathematics Journal is an international, peer-reviewed journal publishing high-quality exposition on mathematical topics related to the undergraduate curriculum. We welcome engaging writing on new mathematics or new perspectives on known mathematics, and encourage historical perspectives, pedagogical notes, and open questions where possible. Also, The College Mathematics Journal has a tradition of an annual issue dedicated to recreational mathematics. Please see the journal's Aims & Scope for information about its focus and peer-review policy.

Peer review

Taylor & Francis/Mathematical Association of America is committed to peer-review integrity and upholding the highest standards of review. Once your paper has been assessed for suitability by the editor, it will then be double blind peer-reviewed by expert referees. Find out more about what to expect during peer review and read our guidance on publishing ethics.

Because of the double blind review system, all identifying information must be removed from the manuscript before submission. This includes email address, institutional information, and passages such as "we have shown" with a reference to your own work.

Preparingyour paper

Submission types

The College Mathematics Journal accepts the following types of submissions: articles, Classroom Capsules, Proofs Without Words, problems, solutions to published problems, and Media Highlights. Letters to the Editor on any topic are also welcome, and all kinds of comments, criticisms, and suggestions for making CMJ more lively, entertaining, and informative.

CMJ articles are at most 12 pages long (including the author pictures and biographies) with a mean page length of 6. Supplementary materials such as computer code, exercise solutions, and long proofs can be made available on the journal website. See below for style and structure details. Submission is required via the CMJ's Editorial Manager system, editorialmanager.com/collmathj/.

A Classroom Capsule is a short article (1–3 pages) that contains a new insight on a topic taught in undergraduate mathematics, preferably something that can be directly introduced into a college classroom as an effective teaching strategy or tool. Submission is required via the CMJ's Editorial Manager system, editorialmanager.com/collmathj/.

Proofs Without Words supply visual understanding of a mathematical result in at most one page. Submission is required through CMJ's Editorial Manager system, editorialmanager.com/collmathj/.

Problems and Solutions aim to challenge students and teachers of collegiate mathematics. They can address any part of the undergraduate curriculum. Whenever possible, a proposed problem should be accompanied by a solution, appropriate references, and any other material that would be helpful to the editors. Proposed problems should be sent to CMJ problems@maa.org. Solutions of published problems should be sent to CMJ solutions of published problems and the collegiate mathematics. They can address any part of the undergraduate curriculum. Whenever possible, a proposed problem should be accompanied by a solution, appropriate references, and any other material that would be helpful to the editors. Proposed problems should be sent to CMJ problems@maa.org. Solutions of published problems should be sent to CMJ solutions.

Media Highlights are short reviews (up to half a page) intended to help CMJ readers monitor a broad spectrum of publications, web materials, professional activities, and instructional resources. Readers are encouraged to submit items that will be of interest to colleagues in the mathematical community. Media Highlights should be sent to mediahighlights@maa.org.

Inquiries, corrections, and general correspondence should be sent to the editor at cmj@maa.org.

Topical Index to The College Mathematics Journal, 1970–2016

A searchable index (pdf) by title, author, and related curriculum subject of all articles, capsules, and book reviews published in *The College Mathematics Journal* since 1970. Maintained by Donald E. Hooley, Bluffton University, Bluffton, OH.

Problems and Solutions Index, 1973–2016

A list (pdf) in order of publication of all problems printed in *The College Mathematics Journal* together with their solutions (by title and issue). Maintained by Charles K. Cook, Sumter, SC.

Structure

The College Mathematics Journal articles do not have an abstract, nor a section header called "Introduction." Rather, they just start with an engaging opening section described below. There is a short summary printed at the end of each article. That short summary is used in various places to advertise your paper. Therefore, it 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 summary should highlight the concepts of the paper rather than summarize the mechanics. The summary is the first impression of the paper, not a technical summary of the paper. Mathematical notation is discouraged in the summary as it can limit the interest of the broad readership of the MAA and complicate internet searches.

Formatting and templates

Manuscript preparation in La TeX is encouraged; submissions in Word are allowed. Figures should be saved separately from the text.

LaTex templates for articles and Classroom Capsules, along with the CMJ style file, are available. Please save the LaTeX template and open it, ready for use, by clicking on the icon. The style file includes graphicx, color, and the AMS mathematics packages; do not use any other packages.

Style guidelines

The College Mathematics Journal seeks lively, well-motivated articles that will enrich undergraduate instruction and enhance classroom learning, as well as expository papers that stimulate the thinking and broaden the perspectives of those who teach undergraduate-level mathematics. Historical perspective, pedagogical notes, exercises, and open problems are all welcome elements of articles. There is also an annual issue dedicated to puzzles, games, and general topics in recreational mathematics.

Style Do's

- 1. Write in an inviting, captivating style. If you fail to capture the reader's attention in the first paragraph, it is unlikely that you will do so later on. Any of the following are desirable as an opening paragraph: a surprising conclusion, an especially exciting example, an easily understood enticing challenge, a simple figure that poses an interesting question, a relevant anecdote, or a shocking fact. Your first paragraph should motivate what you intend to do in your article.
- 2. Provide a generous list of references. If appropriate, inclusion of a few exercises is encouraged. In general, articles should stimulate readers to learn more about a topic.
- 3. Illustrations that capture the essence of a mathematical idea, as well as the reader's attention, are especially encouraged.

Style Don'ts

- 1. Avoid a 'theorem-proof' organization. Proofs in *The College Mathematics Journal* should be presented as well-illustrated stories in which the plot stands out clearly.
- 2. Avoid long, detailed calculations. Provide enough details and, when necessary, descriptive dialogue so that readers can follow your results. But omit easily verified, tedious calculations or those that can be found in readily available sources.
- 3. Try to avoid specialized jargon and complicated notation. When technical terms are needed, define and illustrate those likely to be familiar only to specialists.

References

References should be presented in a separate section at the end of the document. The references should be listed alphabetically by the first author's last name, then, as needed, by the co-author's last names and the resource's title. Once placed in alphabetical order, the references should be numbered sequentially. References should not be repeated in the list, nor should multiple references be combined under a single reference number. Digits in square brackets (e.g., [1, 2]) should be used for in-text citations of the numbered references. Bracketed citations should precede terminal (e.g., periods, commas, closed quotation marks, question marks, exclamation point) and nonterminal punctuation (e.g., semicolons, colons). Merriam-Webster's Collegiate Dictionary (11th ed.) should be consulted for spelling.

Author listings in references should be formatted as indicated below:

1 author	Smith, A.
2to10authors	Smith, A., Jones, B., Smythe, C., Jonesy, D., Smitty, E., Jonesi, F., Smithe, G., Janes, H., Smithee, I., Junes, J.
11 or more authors	Smith, A., Jones, B., Smythe, C., Jonesy, D., Smitty, E., Jonesi, F., Smithe, G., Janes, H., Smithee, I., Junes, J., et al.

International Organization for Standardization 4 List of Title Word Abbreviations (ISO 4-LTWA) models should be employed for abbreviating journal titles and conference names in the reference section. Examples of common reference types appear below:

Journal	[12] Cairns, G. (2017). Equitable candy sharing. <i>Amer. Math. Monthly.</i> 124(6): 518–526. doi.org/10.4169/amer.math.monthly.124.6.518
Book	[2] Johnson, A. S. A., Madden, K. M., Şahin, A. A. (2017). <i>Discovering Discrete Dynamical Systems</i> . Washington, DC: Mathematical Association of America.
Book with titled volume and edition	[18] Heath, T. (1981). From Aristarchus to Diophantus. A History of Greek Mathematics, Vol. 2, 2nd ed. Mineola, NY: Dover.
Edited book chapter	[34] Sholten, P., Simonson, A. (2010). The falling ladder paradox. In: Diefenderfer, C. L., Nelson, R. B., eds. <i>The Calculus Collection: A Resource for AP* and Beyond</i> . Washington, DC: Mathematical Association of America, pp. 149–154.
Edited book chapter with volume and edition (translation)	[26] Faddeev, D. K. (1969). Linear algebra. In: Aleksandrov, A. D., Kolmogorov, A. N., Lavrent'ev, M. A., eds. <i>Mathematics: Its Content, Methods, and Meaning</i> , Vol. 3, 2nd ed. (Gould, S. H., Hirsch, K. A., Bartha, T., trans.) Cambridge, MA: MIT Press, pp. 37–96.
Online/Website	[8] United States Census Bureau. (2014). American housing survey: 2013 detailed tables. census.gov/newsroom/press-releases/2014/cb14-tps78.html
Dissertation/Thesis	[26] Jenssen, M. (2017). Continuous optimisation in extremal combinatorics. PhD dissertation. London School of Economics and Political Science, London, UK.
Conference presentation	[4] Baranov, A. (2016). Spectral synthesis in Hilbert spaces of entire functions. Presented at the 7th European Congress of Mathematics, Berlin, Germany, July 18.
Paper/Report	[55] Grigg, W., Moran, R., Kuang, M. (2010). National Indian education study. NCES 2010-462. Washington, DC: National Center for Education Statistics.
Newspaper	[22] Chang, K. (2017). Ancient homework: Trigonometry in Babylon? Go figure. <i>New York Times</i> , September 5, p. D2.
Patent	[67] Pfeifer, A., Muhs, A., Pihlgren, M., Adolfsson, O., Van Leuven, F. (2017). Humanized tau antibody. U.S. Patent 9,657,091. May 27.
Computer software with developer	[10] Noguera, J., Cumby, C. (2017). <i>SigmaXL</i> , Version 8.0. Kitchener, ON, Canada: SigmaXL, Inc.

Computer software without developer	[76] SPSS Amos, Version 22.0. (2013). Armonk, NY: IBM.
Film	[44] Menéndez, R. (1988). Stand and Deliver. Burbank, CA: Warner Bros.
Television episode (recorded)	[6] du Sautoy, M. (2013). The music of the primes. In: <i>The Story of Math Collection</i> . Silver Spring, MD: Athena.
Song (album recording)	[13] Lehrer, T. (1965). New math. In: <i>That Was the Year That Was</i> . Burbank, CA: Reprise.

Checklist: what to include

- 1. Author details. Please include all authors' full names, affiliations, postal addresses, and email addresses on the cover page. Where appropriate, please also include ORCiDs and social media handles (Facebook, Twitter or LinkedIn). One author will need to be identified as the corresponding author, though all author email addresses will be displayed in the published article. Authors' affiliations are the affiliations where the research was conducted. If any of the named co-authors moves affiliation during the peer-review process, the new affiliation can be given as a footnote. Please note that authorship may not be changed after acceptance. Also, no changes to affiliation can be made after your paper is accepted. Read more on authorship here.
- 2. Mathematics Subject Classification. For *The College Mathematics Journal*, should also provide appropriate 2010 Mathematics Subject Classification terms for their paper. Please read our page about making your article more discoverable for recommendations on title choice and search engine optimization. The "Mathematical Subject Classification Index (MSC)," available at ams.org/msc/msc2010.html, or in pdf form at mathem.pub. ro/dept/MSC-2010.pdf. When submitting your manuscript, please provide at least one and up to three 5-digit MSC classifications that best describe your paper.
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 - This work was supported by the <Funding Agency #1> under Grant <number xxxx>; <Funding Agency #2> under Grant <number xxxx>; and <Funding Agency #3> under Grant <number xxxx>.
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- **8. Tables.** Please supply editable table files. Tables should be created using LaTeX's tabular environment and they should be set in place. Articles with multiple tables should number them (and allow them to float) using the table environment.
- **9. Equations.** If you are submitting your manuscript as a Word document, please ensure that equations are editable. Please see our page on mathematical symbols and equations for more information.

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If you are submitting in LaTeX, please produce a PDF before submission (you will also need to upload your LaTeX source files with the PDF). Authors who use LaTeX are urged to use the CMJ article style (available here) and LaTeX's standard environments with no custom formatting or additional packages.

Your manuscript must be accompanied by a statement that it has not been published elsewhere and that it has not been submitted simultaneously for publication elsewhere.

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