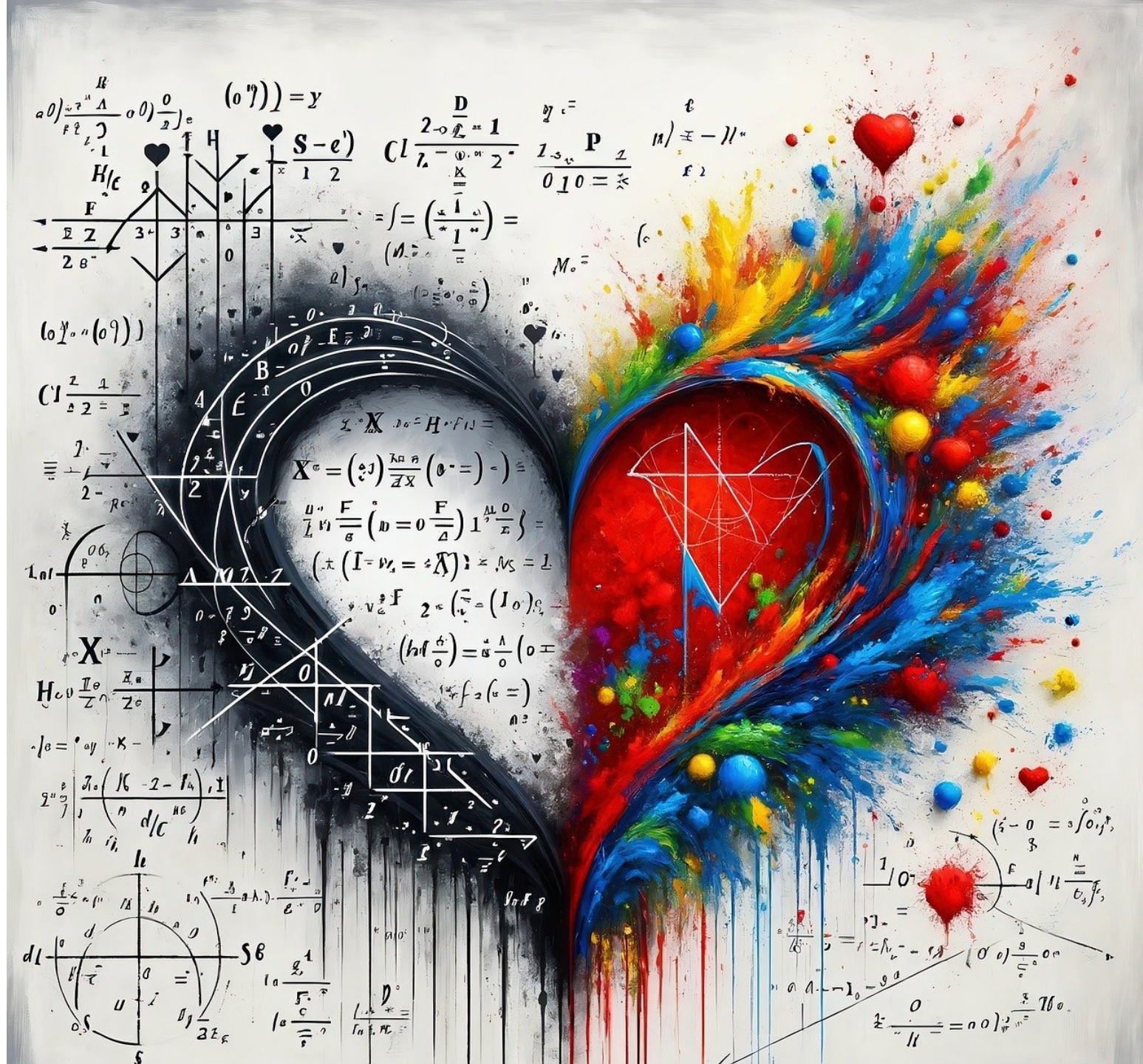


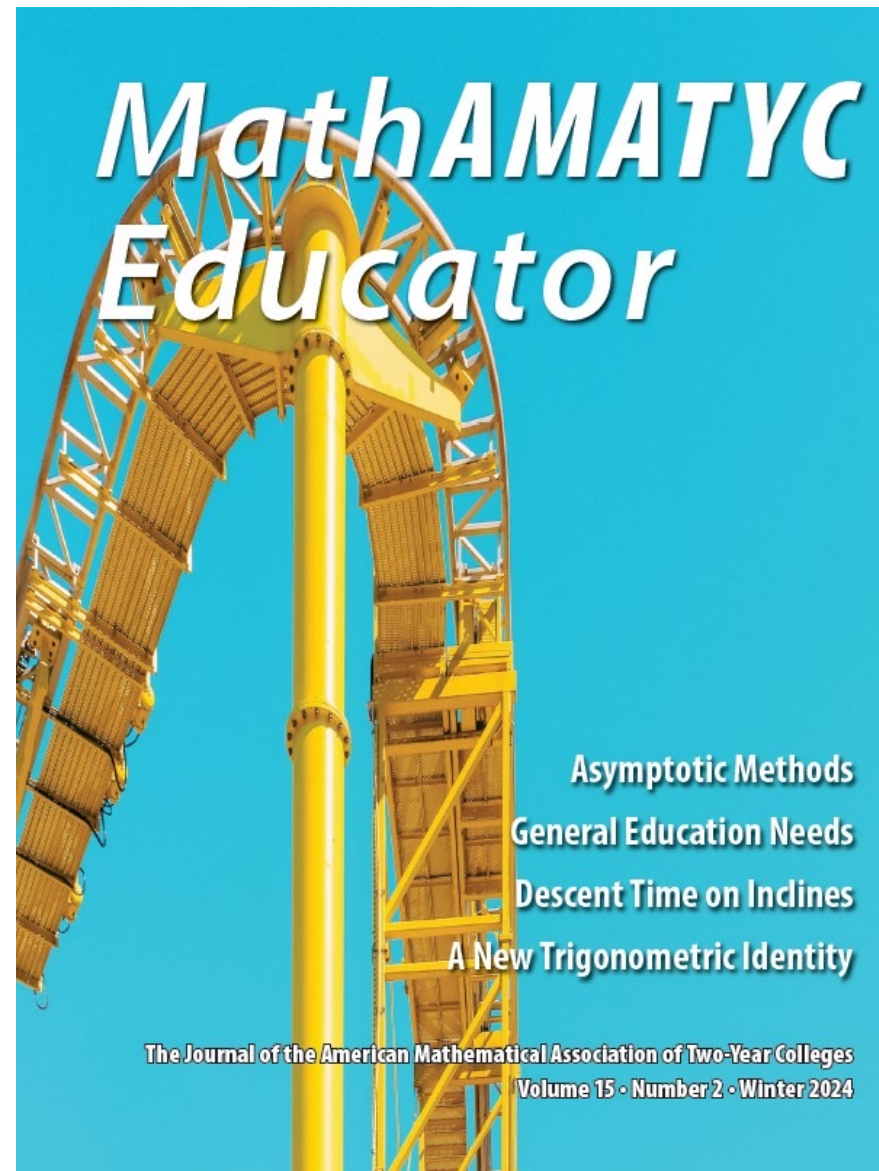
# Enhancing scholarship by solving math problems in journals

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*Traditionally, publishing articles is the primary method to enhance our scholarship. Nevertheless, there exist alternative avenues for scholarly growth. For instance, one can contribute by solving math problems in journals, thereby gaining recognition, personal satisfaction, and even fostering a sense of enjoyment in the process.*



When submitting a solution to a mathematical problem in a journal, there are two primary outcomes:

Your solution is correct



or

Your solution is incorrect





If your solution is correct, outstanding, and exceptional

then the editor of the journal will publish your solution as the primary solution.

examples:

[\*\*problem I-1 in The Problem Section of MathAMATYC Educator Winter 2024\*\*](#)

[\*\*problem 20 in The Problem Corner Section of MTRJ Winter 2024\*\*](#)



If your solution is correct and outstanding but not exceptional

Then the editor of the journal may publish your solution as a secondary solution.

Example:

[problem I-2 in The Problem Section of MathAMATYC Educator Winter 2024](#)

[problem 20 in The Problem Corner Section of MTRJ Winter 2024](#)



If your solution is correct but falls short of being outstanding or exceptional

Then you will still receive acknowledgment from the journal's editor, and your name will be included in the list of correct problem solvers published in the journal.

Examples:

[problem 2061 in MAA Mathematics Magazine](#)

[problem 20 in The Problem Corner Section of MTRJ Winter 2024](#)



If your solution is incorrect

then the journal's editor will anonymously report the number of erroneous submissions received.

Example:

[problem 2126 in MAA Mathematics Magazine](#)



# Conclusions

- Publishing articles is a primary method for improving scholarship.
- Solving math problems in journals offers unique enhancements to scholarship.
- Active engagement in problem-solving fosters critical thinking and analytical skills.
- It deepens understanding and mastery of mathematical concepts.
- Engaging with math problems complements traditional publication practices.
- It contributes to a more well-rounded and enriched scholarly profile.

Handwritten mathematical notes and diagrams on a chalkboard background:

- Equation:  $d_1^2 + d_2^2 = 4a$
- Diagram: A quadrilateral with vertices A, B, C, D and a point O inside.
- Diagram: A cylinder with height H and radius r.
- Diagram: A circle with a shaded segment.
- Equation:  $\frac{5x-2x}{12} \cdot 4$
- Equation:  $x-y$
- Equation:  $2+2=4$
- Diagram: A 3D rectangular prism.
- Equation:  $p = \frac{1}{2}(a+b+c)$
- Equation:  $E=mc^2$
- Equation:  $y=f(x)$
- Diagram: A graph of a function y=f(x) with a shaded area under the curve.
- Equation:  $A^2+B^2=C^2$
- Equation:  $\sin(x-y)$
- Equation:  $\sin(x-1)$
- Diagram: A right-angled triangle with vertices A, B, C and hypotenuse c.
- Equation:  $\sqrt{g}$
- Diagram: A cone.
- Equation:  $d_1^2 + d_2^2 = 4a$
- Equation:  $x = \frac{y}{2} + 10(2\sqrt{a})$
- Equation:  $R = \frac{c}{2}$
- Diagram: A circle with center O and radius r.
- Equation:  $x = \frac{x^2 + \sqrt{8^3}}{\sqrt{1 - (\frac{\sqrt{2}}{2})}}$
- Equation:  $a^2 - b^2 = (a-b)(a+b)$
- Diagram: A triangle with sides a, a, a.



***Thanks!***

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## ***References***

*MathAMATYC Educator*

<https://amatyc.org/general/custom.asp?page=MathAMATYCEducator>

*Mathematics Magazine*

<https://maa.org/press/periodicals/mathematics-magazine>

*The American Mathematical Monthly*

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*The Problem Corner*

<https://commons.hostos.cuny.edu/mtrj/wp-content/uploads/sites/30/2024/02/The-Problem-Corner-Winter-2024-Updated.pdf>

