

Mathematical Identities

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Mathematical Identities

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Every mathematician is unique, and the singular path that led each one of us to mathematics leaves an imprint that affects the way we understand and present it to the world. This issue contains several articles that explore how our mathematical identity affects our world view and our work, and how mathematics can be used to learn more about our identity and relation to the world.

James Gatewood and Candice Price lead us off by showing how methods from social networks analysis can be used to understand the structure of women's relationships in conflict zones. Vladimir Tasić explores what mathematics and philosophy can teach each other through the work of Alain Badiou. Carmen Latterell and Janelle Wilson explore the different metaphors that elementary and secondary school teachers use to describe what mathematics is and how they see their own selves in relation to it.

Laura Broley, Chantal Buteau, and Eric Muller consider how three different generations of mathematicians contributed to construction of a mathematical game for teaching probability; throughout they share how the process has helped them and their mathematical identities evolve.

Mikhail Katz and Luie Plev consider the use of infinitesimals versus ϵ - δ formalizations in teaching and understanding Calculus. Whitney George argues that children first learning about mathematics benefit from being introduced to topological concepts that currently are not part of K-12 education. Both articles call for significant changes to what is today standard in mathematics classrooms.

Susan D'Agostino presents a lighter side of our identity by giving us a short proof that mathematically, every minute of your life has been interesting (whether you knew it at the time or not!) Marion D. Cohen then gives a more sobering look at how mathematical identities are formed as she shares some thoughts about her path through graduate school and the obstacles she had to overcome.

Jason Callahan and Carol Gee offer us a blueprint for introducing aesthetics into a liberal arts mathematics course. Kevin Knudson looks at how Cantorian notions of the infinite can serve as metaphors in an exploration of the works of Kafka.

Of course all writers face an uphill battle in getting their creative works published. Jon Wesick presents a statistical approach to getting published quickly. Robin Whitty then considers the question of why simultaneous discovery in mathematics is such a common occurrence.

Zoheir Barka takes us in an artistic direction, showing how the standard multiplication table of positive integers contains wonderful hidden patterns using modular arithmetic. Randy Schwartz then introduces us to contingency tables and tests for independence using the classic connection between malaria and sickle cell anemia. Günhan Caglayan presents a group activity involving basketball statistics and shares his students' responses.

This issue includes two perspective pieces. In the first, Man Keung Siu considers the pros and cons of mathematical competitions. In the second, Egan Chernoff presents what happens when mathematics secondary education becomes disconnected from mathematical understanding.

Emily Grosholz reviews the book *Realizing Reason* by Danielle Macbeth, which gives a critical introduction to the history of mathematical formalism in Western thought.

Starting with [Volume 5 Issue 2 \(July 2015\)](#), we have increased the number of poems we publish per issue to five. This issue offers us that (in the poems of Mason Porter, Eli Barr, Greg Huteson, Lauren Carlson, and Dan McQuillan) and a bit more, because we also have a poetry folder from Lawrence Lesser. Kenan Ince contributes a short fiction piece to this issue, while Robert Dawson contributes a longer one.

Finally, we close with an announcement by Jenneke Krüger on ICHME-5, the Fifth International Conference on the History of Mathematics.