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**Mathematicians' example-related activity when exploring and proving conjectures.**

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Summary: Examples can play a critical role in the exploration of conjectures and in the subsequent development of proofs. Although proof has been an object of extensive study, there is more to learn about the precise ways in which mathematicians leverage examples as they formulate proofs. In this paper, we present results from surveys and interviews with mathematicians that targets the role of examples in mathematicians' proof-related activity. Their responses shed light on specific example-related activity (including strategic example selection and use) and on the overarching ways in which they engage in such activity (including a focus on generalization and metacognition). We share illustrative excerpts from the surveys and interviews and discuss educational implications of the results.

*Classification:* E55

*Keywords:* examples; proof; mathematicians

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