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Advanced Mathematics for Teachers: Vision and Considerations of Mathematicians

Mathematicians often act as teacher educators de facto, without explicitly identifying themselves in this role. Acknowledging their contribution to teacher education, we examine 24 mathematicians' views on the value of advanced mathematics for secondary mathematics teachers. By providing rich examples that could shape and expand teachers' understanding of mathematics, the majority of the participating mathematicians emphasized the value of mathematical investigation and connections across mathematics domains. Notably, when drawing connections between advanced and school mathematics, examples provided by the mathematicians were relatively scarce. We sought and provided possible explanations.