Situation 18: Exponential Rules
Prepared at UGA
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Prompt

Students in an algebra class have just finished a unit on exponential powers, including standard exponential rules and negative exponents. In completing a sheet of true/false questions, most of the students have classified the following statement as false: $2^{17} + 2^{17} = 2^{18}$.

What kind of mathematical knowledge does the teacher need to consider in responding to the work of the students?

Commentary

Mathematical Foci

Mathematical Focus 1

Mathematical Focus 2

Mathematical Focus 3

Mathematical Focus 4