

## **Exploring students' solution: a semiotic approach to assessment**

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### **Abstract**

The present research study explores students' solutions for a test item from the Swedish national test (a standardized test) in mathematics. Students' solution for 115 grade 9 students' is closely analysed using a theory driven analytical construct founded on what is considered as "identification" as well as a "critical-analytical" approach to problem solving. Based on this construct it is observed that a sizable number of students' solutions follow a visual strategy with a strong reliance on everyday forms of expression. The analysis used in this study problematizes the assessment of mathematics competency from high stake tests, as well as in the mathematics classroom.