Automatic Grading of Online Graph Plotting Problems

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In mathematics education, students are frequently tasked with drawing graphs that accurately represent given mathematical formulas. This paper presents a novel method for the automated grading of student-drawn graphs within a learning management system (LMS). Our work specifically utilized Bézier curves and Oshima spline curves (a variant derived from Bézier curves), developing assessment questions with the aid of the dynamic geometric graph software "KeTCindy".