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**A historical excursion: Carlyle's geometric solution to the quadratic equation.**

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Summary: A study of the history of mathematics offers rich learning opportunities for students. In this article, we present a process for constructing geometric solutions to the quadratic equation that was developed by one 19th century mathematics student (Thomas Carlyle). In particular, Carlyle discovered that the  $x$ -intercepts of a particular circle (which we define as the Carlyle circle) corresponds to the solutions of quadratic equations of the form  $x^2 + bx + c = 0$ . With advances in technology, Carlyle's geometric solution to quadratics could now be considered an historical curiosity. As this article demonstrates, however, Carlyle's solution offers an effective context for deepening and connecting students' understanding of both algebra and geometry.

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