

**Meeting:** 1003, Atlanta, Georgia, MAA CP Q1, MAA Session on Using Handheld Technology to Facilitate Student-Centered Teaching/Learning Activities at the Developmental Algebra Level

1003-Q1-1673      **Tonya C. Jones\*** (tjones@kennesaw.edu), Kennesaw State University, Department of University Studies #1802, Kennesaw, GA 30144-5591, and **Robert Birrell** and **Pinder Naidu**. *Calculator Activities that Enhance Developmental Mathematics*.

There are many benefits of using a graphing calculator in developmental algebra classes. This paper focuses on student activities that offer options for introducing solving equations.

Two in class group activities will be presented. The first activity leads the student through the process of discovering what it means to be a solution to a linear equation by using the table feature of the graphing calculator, a discussion of the special cases and the limitations of this method. The second involves using the graphing method to find the solutions of linear equations. Students will discuss the solution, what the y value of the point of intersection represents, discover why there are two special cases and how they should be interpreted. Finally, students should summarize the form of the solutions to linear equations and the limitations of this method. Extensions will be discussed.

After completing these activities, students are ready to approach the algebraic methods for solving equations with a solid foundation of what it means to be a solution to an equation from both a numerical and graphical point of view. Also, students now have alternative means of checking their solutions, all of which leads to improved concept connections, visualization and student confidence. (Received October 06, 2004)