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Karen Allen Keene* (kakeene@ncsu.edu), PO Box 7801, North Carolina State University, Raleigh, NC 27695, and Nicholas Fortune. What does it mean to find a solution to a system of differential equations? Hands-on and technology helps with the conceptualization. Preliminary report.

In this presentation, we will present tasks used in an Inquiry-Oriented Differential Equations class that will help with conceptualizing the idea of a solution to a system of differential equations. Participants will work through a task that is hands-on that students have done in approximately 50 classrooms, and then see technology that supports student understanding of the notion and how it can be developed from the notion of solution to a single ODE. Work and video from students participating in this activity will be presented. Finally, the presenters will discuss this tasks in the context of the bigger notion of inquiry-oriented teaching of differential equations. (Received September 20, 2016)