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As modern technology advances at a very rapid pace, the need for properly integrating technology into mathematics curriculum and the constructivist approach to learning and teaching have been addressed frequently. However, the major effort to integrate technology into the mathematics classroom has been focused on the graphing calculator, Computer Algebra System (CAS) and other teaching aids such as Blackboard and Smart Board, and the implementation of constructivism in the classroom has been stagnated by bureaucracy and unwilling teachers. Robotics is a fast-rising technology field, and integrating robots into an undergraduate mathematics classroom can help us create an environment that fosters mathematics, science and engineering, and the constructivist approach to learning and teaching. In this paper, we explore mathematical opportunities in robotics by demonstrating how small robotic development kits, such as Lego Mindstorm NXT can enhance learning mathematics and promote the constructivist approach in learning. (Received September 19, 2007)