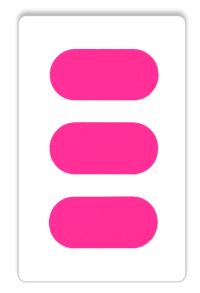
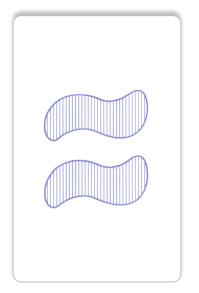
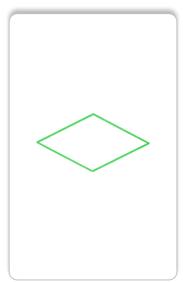
## GAME, SET, MATH!









Come learn about the math behind SET® and impress your friends when you play!

Professor Liz McMahon from Lafayette College

**Abstract:** The card game SET is played with a special deck of 81 cards. We can learn a lot about the game through combinatorics, probability, linear algebra and geometry. In addition, the cards are a good model for the finite affine geometry AG(4,3); we will see how to use the geometry to explore the game and, even better, how to use the game to understand the structure of the geometry. There is a surprisingly beautiful structure to complete caps, which are collections of cards with no sets. If you'd like some practice with the game before the talk, go to <a href="https://www.setgame.com">www.setgame.com</a> for the rules and a Daily Puzzle.

Wednesday, April 4th 7:00 PM, Silsby 028

