ABSTRACT

TITLE:	Linear Transformations on Torus
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ABSTRACT: This semester I studied the dynamical system of taking a point in the real plane and sending it down to the torus, which is a 2-dimensional tube. I looked at periodic points of this mapping and showed "and if" and "only if" relation between rational points and periodic points. I then looked at the conditions for chaos of a map that creates a line with an irrational slope.