## **Major Accomplishments**

One of the reasons I chose to research Smith was because of her expertise in her field. She is not just good in the mathematics that she researches, she is the best. Smith is known for her work in commutative algebra as well as algebraic geometry. In 1987, Karen graduated from Princeton University with a major in mathematics education in order to teach math to the youth of New Jersey. After one year of teaching, Smith decided to further her education. She attended graduate school at the University of Michigan and received her masters and Ph.D. This is where she wrote a thesis in commutative algebra under the direction of Professor Melvin Hochester. Smith worked at Purdue University, and then moved to Massachusetts and became an instructor at MIT. Finally she moved to Ann Arbor Michigan and is a professor even today at the University of Michigan.

During Smith's mathematical career she has been awarded the Ruth Lyttle Satter Prize for her work in commutative algebra. This accomplishment took place in the year 2001. This award has placed Smith as a world leader in the field of tight closure. She has also narrowed the gap between algebraic geometry and commutative algebra through her work in tight closure.