## {THE POWER OF TWO}

\*// Alumni Chris and Nicole Knapp loved math before they loved each other. But the idea of pursuing a math career didn't come together until they did. //\*



### THIS IS A STORY OF BOY MEETS GIRL

...in the Tutoring Center at Kent State University at Stark. Boy tutors students in math. Girl tutors students in Spanish. In between, they race each other to complete math problems for fun. And slowly their love begins to bloom...for math.

Kent State Stark alumni Chris and Nicole (Cleary) Knapp loved math before they loved each other. But the idea of pursuing a math career didn't come together until they did.

"I always thought if you were a math major, you'd have to become a teacher," says Nicole. "I didn't realize how many other opportunities there were. So when I started college, I majored in Spanish."

Chris thought the same. That's why he originally majored in business finance and took calculus classes for pure enjoyment.

"The topics were really abstract and complex," he says. "It was hard to explain to others what I was studying at Cornell. That's when I realized I wanted to do something more 'normal' with math. I tried internships in computer science, statistics and actuary science and learned that math can be applied to almost any field, in analytical positions."

Analytics attracted Nicole, as well. A Kent State Stark statistics course introduced her to using data to uncover truths. After her junior year, during a summer math program at Miami University, she became even more enamored with statistics.

"Someone from Procter & Gamble came to talk to us about how they collected data, analyzed it and used it to help make marketing decisions about Tide laundry detergent," says Nicole.

# "We want to tell students how good it is to major in math at Kent State Stark."

< Chris Knapp, claims control analyst at Progressive Insurance >

"I had friends who were majoring in math and taking really fun classes," remembers Chris. "My business math classes weren't as exciting. It wasn't until I took a number theory class that I realized just how much I enjoyed math. I switched majors my junior year."

Chris' compliments during their impromptu math races had encouraged Nicole to switch majors, as well.

Nicole graduated with a bachelor's in math in 2010. Chris graduated with a bachelor's in math and another in finance in 2011. Both went on to The University of Akron where they earned master's degrees in statistics. They married while there.

Today, the Knapps still have an affinity for arithmetic and continue to solve problems together as data analysts for Progressive Insurance in Mayfield Heights, Ohio.

#### Affinity for arithmetic

"My plan was to earn a doctorate and eventually become a math professor," says Chris. But that changed after a summer program at Cornell University for undergrads pursuing academic math careers. She was fascinated — and finally certain of how to put her math degree to work.

During grad school, Nicole found a data analyst job online, one similar to the Procter & Gamble presenter's. She applied and, soon after earning her master's degree, got hired to work for auto insurance giant Progressive. A few months later, Chris joined Nicole in a similar job while he finished his master's degree.

#### Putting their math degrees to work

Today, Chris and Nicole are senior data analysts in Progressive's claims department. They review data about accidents, vehicle damage, injuries and more and present it to claims leaders in everyday language to help them make smart business decisions.

Every day, they explore questions, such as "Does Progressive pay appropriately for injury claims?" and "Why do policyholders require so many days with rental cars after an accident?"

"Data analysts are go-betweens," explains Nicole. "Progressive collects lots of data and business leaders have lots of questions.







## We put the pieces together to find answers and develop business insights."

Both Nicole and Chris say they are further along than they expected to be at this point in their careers.

"We work every day with leaders who are just a few steps away from being CEO," says Chris. "They depend on us to consult with them. They have strong business backgrounds, but we have the math background to help them with all things analytical."

Tutoring at Kent State Stark has come in handy as they teach math concepts to non-math professionals.

"The phrase 'mathematical maturity' was popular at Kent State Stark," says Chris. "That's what we achieved through our classes there and at Akron. We became better able to think analytically and logically, and solve problems for Progressive."

#### How good it is

Now living in Eastlake, near the shores of Lake Erie, the Knapps haven't forgotten where they started. Both return to Kent State Stark each April for the annual Stark County High School Mathematics Challenge.

"We chose Kent State Stark and stayed there after becoming math majors because we really liked the campus," says Chris. "Due to smaller class sizes, we became good friends with our math professors. We want to tell students how good it is to major in math at Kent State Stark."

"Both Nicole and Chris constantly serve as an inspiration to current math majors," says Dr. A. Bathi Kasturiarachi, associate professor of mathematics and interim dean of academic affairs at Kent State Stark. "For a young couple, they are very successful and represent model, conscientious students who made ideal career choices."

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