

**Rap Around Rap Around Rap Around Rap Around Rap Around Rap Around Rap**

**Around Rap Around Rap Around Rap Around Rap Around Rap**



Bishop Kearney senior John Urbanic along with Nazareth students Kathy Faraone and Meg Rimore are astounded at the quick solutions to their probability questions as provided by the computer. Looking on is Professor Neil Bromberg who is teaching the five week Math probability course at R.I.T.

Photo by Susan McKinney

**In the World of Probabilities**

By JOAN M. SMITH

"Take a drunken sailor," declared Prof. Neil Bromberg of the Rochester Institute of Technology's math department; "he'll take one step to the right and then one to the left because he doesn't know where he's going."

This is labeled the random walk and the probability question which is computed: how many steps will he take to the right while taking a certain number of steps?

What significance is attached to the answer to a question like this? Quite a bit, according to Nazareth students Meg Rimore, Kathy Faraone, and fellow classmate, Bishop Kearney senior John Urbanic. These young adults are among the 22 area high school students who are participating in the first Probability seminar at R.I.T. and sponsored by the National Foundation of Sciences.

The purpose of the program as well as the other 125 seminars in math, chemistry and biology, being held throughout the country, is to get young people interested in the sciences. Meg, Kathy and John are enthusiastic about the course and offered many reasons for taking it.

John indicated he took the class to help him determine what courses to major in when he goes to college.

Kathy's reason was "mainly for the challenge." A Nazareth senior, she is planning to take a veterinary course in college and decided the probability class would acquaint her with the college atmosphere.

Meg, a junior who is looking forward to a career in medicine, stated that she is intrigued by the course's challenges in learning to practically apply math to everyday situations.

The students have great rapport with Dr. Bromberg and are having a grand time applying probability logic to the various games of chance such as how many times a seven can be thrown in a dice game and the inevitable result (if you play long enough) of trying to break the bank at Las Vegas. According to Bromberg, the initial historic researches into math probabilities came as a result of the gambling instinct of mankind.

The course investigates many situations by computing the number of favorable events out of a total number of happenings. Data is compiled and computation experiments are undertaken in the fields of genetics, environments, the stock market, birth and death processes and even the life style of rats.

The "queuing thing" as Bromberg called it, is an instance of probability phenomena and one which is confronted everyday at check-out counters, restaurants and hospital emergency waiting lines.

The variable in these situations is how many people are expected at any given time. This variable is combined with the existing facilities like the number of tables and chairs in a restaurant and is computed to determine, as in the case of emergency rooms, how many doctors should be available to expedite the number of expected medical cases.

The computers really interested the students. They delight in feeding the machines number combinations and then watch it digest the data, and within minutes produce the answers to their probability questions.

Besides having the minds of inquisitive mathematicians these young adults are busy with involvements. Meg is vice president of the Nazareth band, a member of the Spectrum staff, and is the freshman choir accompanist.

Kathy is equally as busy with her singing in the Perosian Choir, work with the Student Council, and as treasurer of the Spanish Club.

John plays intramural sports and is a chess enthusiast.

The students will receive a certificate when the class ends on July 30 after which they are looking forward to a respite from academic endeavors until September.

**Catholic Performers Strengthen Section 5 Entry**

By JOHN DOSER

Track and field in the Rochester area (Section 5 of the New York State Public High School Athletic Association) is improving each year, says McQuaid head track coach Bob Bradley.

One of the reasons why, he explains, is the addition, although it's not yet permanent, of Catholic high schools to the annual sectional tournament, which obviously results in the section's sending its absolute best into the annual state intersectional meet.

One of McQuaid's best entries into the state meet in recent years is Tom Horton, a lanky June graduate who is going on to Boston College with a partial athletic scholarship.

Horton won the New York State intersectional half mile in the Section 5 record time of 1:52.3, and earned an invitation to compete in the Golden West Invitational at Sacramento, considered to be the top high school run in the U.S.

Unfortunately for Horton, his leg became entangled with the leg of another runner on the first lap and Horton fell. When he looked up and regained his perspective, the field was far and away from him.

It is understandably disappointing that he finished last in the race, but Horton, a veteran competitor even at his age, took the experience in the proper light.

Ironically, the Golden West field had been increased to ten runners to accommodate Horton because his intersectional half mile time was better than the time of several others already invited.

Horton's big advantage, according to Bradley, is the excellent stride he has, due in part to his height, which is close to six feet.

Horton says he concentrates on each event he runs, not particularly the team opponent or the specific runners he may face in any event.

Even though he failed to impress at Sacramento, Horton has

the distinction of being one of only a handful of Rochester area runners since 1970 who have been invited to the Golden West test.

His older brother Chris ran in the 1973 Golden West race and turned in a 4:09 mile, still the fastest mile ever run by a Rochester runner, Bradley says.

Bradley, now in his 15th year at McQuaid, where he teaches English, takes to the typewriter when the occasion calls for it.

Recently he wrote a letter to an editor objecting to the headline "Section 5 Athletes Outclassed," which supposedly described the Rochester area track and field effort in the June intersectionals.

Bradley explained that Section 5 had produced its best showing ever in the state meet, finishing fifth behind downstate Long Island Sections 1 and 6.

Six years ago, Bradley says, Section 5 trailed winning Section 1 by 70 points; this time Section 5 finished only 15 points behind.

Another example of Bradley's quest for accuracy in headlines was his objection more than 10 years ago to a headline which had McQuaid being "humbled" in football by an opponent victorious by only one touchdown.

He says he often devises his strategy in a given track meet only minutes before the meet, usually on the bus en route to the site.

"Perhaps that's why we don't do as well as we should on some occasions," Bradley notes.

The Knights this season finished third in the City-Catholic League behind champion Aquinas and runnerup Bishop Kearney.

He recalls the first time his club saw Rochester's Olympic distance runner, Dick Buerkle, in action for Aquinas.

"I asked Father Ware who was the bald fellow running around," Bradley found out and never forgot.