Volume 10, Issue 0

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Back and better than never: Matt Koetz (mkoetz1@naz.edu) Heather Ames Lewis (hlewis5@naz.edu)

Jacques Le Tenneur

Almost nothing is known about Jacques-Alexandre Le Tenneur (1610ish—1660ish), including his dates of birth and death. He was a friend of Mersenne, corresponding with him frequently. Although Tenneur was a strong supporter of Galileo's theories, he also had many in-

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Starting at zero

Everything about Everyone

Did you catch that we're now at Volume 10! That's right, the newsletter-without-asingle-name is now in its tenth year. We tracked down all the current and former faculty members and office administrators we could to see what everyone is up to.

Daniel Birmajer

(faculty member since 2003)

Juli graduated from Penfield High School (PHS), and she is attending The Whitman School of Management at Syracuse University. You can find two pictures from her



prom day attached.

Milton graduated from Bail Trail Middle school and he is attending PHS. He is busy playing soccer with the Rochester Futbol Club (RFC) and the Penfield Rangers, and I am busy driving him around from place to place.

Susi is doing fine, working and keeping the house in order while the rest of the family makes every possible disorder. I spent my summer working in mathematics. At the present time I am working on a manuscript with my colleagues from Penn State, and in the evenings, when I am not driving Milton around, I am a soccer referee, my other passion.



You can find more information about me at https://www.linkedin.com/in/ danielbirmajer

Cheri Boyd

(faculty member since 1995)

I still very much enjoy teaching calculus, history of math, geometry, problem solving, exploring mathematics, and statistics to all kinds of Naz students. New this year was inquiry-based Calculus III where the students did an excellent job of developing essential questions, helping each other take new perspectives and sharing their work.

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I spent the Fall 2014 semester on sabbatical auditing courses and attending seminars with graduate students in biostatistics and epidemiology at the University of Rochester Medical Center. I am looking forward to teaching my Nazareth statistics and modeling students to use R in their semester projects next year, and will facilitate a "shadowing experience" for Nazareth math majors with several biostatistics graduate students at UR.



Sam graduated from Pittsford Mendon High School and began a Chemical Engineering degree at RIT in August. Perhaps the biggest change has been not giving him rides everywhere since he got his license! Jamie is learning to manage vision changes from glaucoma and has transitioned to running his own business repairing cleaning equipment for large and small institutions throughout western New York. Always the entrepreneur, it seems to be suiting him well. My Dad was diagnosed with Alzheimers disease last fall, so I'm spending more weekends in Endicott with my family, and learning a lot about memory changes and how they effect daily interactions. I



thought you might enjoy this photo of me with my siblings and my parents. At the last minute my brother Sean (in the middle) said, "Jazz hands, everybody!"

Fern Cardella:

(office administrator since 2003)

Fern Cardella, department secretary, and her husband, Jim, are proud to announce that their son, Zack, graduated from St. John Fisher College in May 2015 with a B.A. in Political Science. After four years of study, two internships, and full-time summer employment, Zack is ready to begin adult life. Watch out world!



Yousuf George (faculty member since 2008)

If you have 100 pounds of grapes that are 99% water (by weight) and you dehydrate them until they are 98% water, how much do they weigh?¹

Yousuf didn't write that problem. But what Yousuf HAS been doing is leading the department in its transition from mostly lectures to a whole lot of inquiry based learning. He's the one who started teaching calculus (and pre-calculus, and real analysis, and basically everything) by writing up problem sets that the students work on before class and then present in class. If it seems hard to learn calculus that way, it is, but only at first. Then it's awesome.

Summer 2015



In addition to teaching awesomer math, Yousuf has been involved with local and regional math teachers through his work with math circles, and, most recently, he's been borrowed by the administration to write the College's re-accreditation report.

Meanwhile, Mahreen, Inara, and Nissa are all at the World of Inquiry School in Rochester (teaching, studying, and studying, respectively) and making the world a better place.



Mary Harrigan (retired faculty member)

We are now living in Murrells Inlet, South Carolina. Murrells Inlet is just south of Myrtle Beach. We are about two miles from the inlet itself and its restaurants and Marsh Walk and we are about four miles from Huntington Beach State Park. The park is a beautiful beach park and camping there is what drew us to the area. There are many transplants in the area, and we feel right at home. There is a nice quilting community, and that helps too. Fall and spring are beautiful, winter is cool, but when locals complain we tell them they have no idea what real winter is. We will have to learn to deal with summer, though. In general, we hope to spend the hottest summer months in the Finger Lakes area where one of our sons lives.



Nicole Juersivich (faculty member since 2009)

Last Fall, I got to try many new things in teaching. I taught statistics for the first time and loved it! I also attended a workshop on how to use inquiry based learning, and used what I learned to teach Calculus I such that it contained basically no lecture.

This year, I hope to create a new course so that we will offer essentially a sequence of mathematics courses designed for elementary and middle school mathematics teachers.

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My husband, Adam, completed his residency, two years of fellowship, and has begun his second year as an attending and assistant professor in epilepsy at Strong Hospital.



On November 8th, we welcomed Maddox Orion to our family. In less than 2 years, we have gone from a family of 2 to a family of 4! It is a such a big, crazy, and wonderful change. We love spending time with our boys. The pic-



Alex is all about trains, Donald Duck, and cake pops. So I have learned to become a master at making cake pops.

(Alexander - 2.5 years; Maddox - 7 months)

National Historic site

in Scranton, PA.

Matt Koetz (faculty member since 2005)



I am gradually working my way through almost every course we offer, having recently taught Linear Algebra and History of Math for the first time each, and teaching Abstract Algebra for the first time in the spring. I also developed a new course in Mathematical Programming (LaTeX, Python & Sage...oh my!) that I just taught (for the first time, by definition) in 2014. Along with many others, I've picked up the inquiry-based learning approach to calculus. Last year I taught my third research course with thirteen students, and it was even more awesome than you think it was.

I became Chair of the department in 2014, and it has been a wild ride since then. The learning curve is steep, but I work in the greatest department ever, so it's actually been a pretty good transition. Despite the additional work, I still enjoy answering random questions (i.e., looking things up) about anything and everything, including dinosaurs, color perception, and astronomy.

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When I'm not teaching or loitering in the Math Center, I keep busy shuttling my 7-year-old son Isaac to karate, my 9-year-old (as the Class of '06 knows all too well) daughter Julia to dance competitions. Shawna went back to school at Naz (Class of 2010) and is now a nurse on the PICC team at Unity Hospital in Greece.

Heather Ames Lewis (faculty member since 1997)

Teaching, knitting, and hanging out with the family...that pretty much sums up life these days. The teaching is at least as fun as it was when I started: it's a lot of the same classes, but I adopted the active learning in Calc that has already been mentioned by others, and recently started teaching the math for elementary education classes. When Susan retired I took over her role as Director of the Math Center, and somehow I've found myself on a rather large number of committees. Fortunately even in the new building (can we still call it that after 3 years?) my office is right next to the Math Center, so there is a lot of activity to keep me distracted.



My husband Mark is still working over at St. John Fisher College, and the boys, now aged fifteen and twelve, are students at the School of the Arts (Emmett in Theatre Tech, and Quentin – shown to the left – in Flute).

We've also managed to

sneak in some travelling, partly for fun and partly as excuses to visit family, who are spread all over the country.

The photo below is from last summer when we visited my younger sister (in the front), who had just graduated from college as a math major (Yeah!) and was getting ready to head off to medical school full-time. [She had been working for the Blue Man Group for the past ten years, which explains the mysterious people in the background]



Kelly (Fuller) Molkenthin (previous faculty member)

Those who know Kelly will not be surprised to know that she is just as enthusiastic as she ever was. She moved to Connecticut to be closer to her family, but she still teaches math at local colleges and drives all over everywhere to take Lindsea (now sixteen) to cheerleading competitions (where cheerleading in this context is more like a combination of competition-level gymnastics and pro-sports—it is incredibly intense and impressive to watch.)

Sara O'Brien

(previous office administrator)

Hello Everyone,

It's hard to believe how long it has been since I was working at Naz. Here's a little summary of what has been going on in my life over these past several years. My husband, Dan, and I have been on many adventures which has taken us to many places in the USA and Europe. We have lived in Florida, Pennsylvania, New York City, Minnesota, and Texas and currently reside in New York City for a second time. Other travels have taken us to England, Ireland, and Austria as well as several cruises. We have met lots of new people and enjoyed exploring all these locations. In addition to all that, our travels quite

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often include trips to visit our children and grandchildren. We have been blessed with 2 granddaughters and 2 grandsons. My daughter Kelly (a former Naz student) and her husband Mike (Phelps) take pleasure from 2 boys, Brody Michael (3 ½) and Dylan Daniel (20 months). At the same time as our son, Cuyler and wife Amanda, enjoy 2 girls, Hazel Seraphina (4 ½) and Loralye Lilly (2). Being a grandmother has been one of the best things that has ever happened to me. Recently, the whole family gathered together in Washington, DC to welcome Cuyler's family back to the US after a 3-year stay in the United Kingdom as well as celebrating his birthday. We all had a wonderful time together. I have included a picture of our growing family for everyone. I think of all you fondly and hope you are doing well.

With warmest regards, Sara O'Brien



Susan Riegle (retired faculty member)

Retirement is grand... since our last update Ed and I have acquired three grandchildren Jack, Caitlin and Emory.... we enjoy spending time with them very much. We still ski every winter in Ellicottville and Colorado. We built a new home in 2014 in Ellicottville. Our plan is to sell our Rochester home in a couple of years and move to Ellicottville full time. Our eldest grandchild has taken up skiing at age 3... Jack now loves to come to visit... and go skiing. We expect the next two to follow suit shortly. Our son Alex lives in Alaska so we visit him every year either in Anchorage or at a meet-up in Hawaii. We have just returned from a month in Alaska... Getting to know



Emory was a real delight... living so far away makes it difficult.

But we had some exciting excursions as well. We paddled to the Mendenhall Glacier in a native canoe, flew around Mt. McKinley and landed on a glacier, and caught a 25 lb King Salmon. A highlight for me was that I stood at the end of a runway as my son took off in his F-22... and went vertical immediately.... right above me... the sight and sounds were amazing!



My Dad passed away two years ago at age 95 but we still visit Canada several times a year and spend the month of July at the family lake house.

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So being retired is lots of fun...hope you are all doing well. I remember my time with all of you very fondly.

Charlene Rizzo

(former office administrator)

Charlene is still in the Rochester area, and has been working at Strong Hospital for the past decade.

Judy Rose

(retired faculty member)

After retirement, I took a job at a knit shop which lasted for 10 years. I was able to teach, and have first crack at the yarns for my favorite hobby. I've knit almost 200 pairs of socks for the whole family, and have started a blanket out of the leftovers. For the last few years, I've been volunteering at the Brighton Library. There is a bookstore in the back which sells used books, and I work there every other Monday afternoon. In addition, Friday mornings I volunteer at Flower City Habitat for Humanity. I do data entry for them.

My family has gotten older—my oldest granddaughter graduated from Keuka College a year ago and is an ASL interpreter. Her brother is at MCC, and the California granddaughter will be attending Carnegie Mellon University this fall.

Phil and I have gone on a number of Road Scholar trips, including one to China. I've even done one in CA with my daughter... a Buddhist retreat! Yes, she was the youngest one there.

Last year we rented a house in CA for a month, but usually we're here year round. We just take short trips, a week or so, to CA.

In April, we visited Tres Sabores Winery. My daughter had won a bottle of their wine (excellent) and a winery tour. Here's a photo from that day.

I'd love to hear from former students. Please feel free to give them my e-mail address.





This issue was brought to you by the number 10

According to Wikipedia, 10 is a "number following 9 and preceding 11".



Pluto is often the tenth planet in our solar system, if you include dwarf planets.

You didn't forget about Ceres, did you?

You can draw a regular decagon with a straightedge and compass

10 is the street address of the Prime Minister in London (on Downing Street).



One World Trade Center is built in the shape of an elongated (and tapered) square anti-prism, which has 10 faces.



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Problems

Ten is written as 11 in Base 9.



Solutions to Problems 9.3:

9.3.1: *a*, *b*, *c*, and *d* have areas 1/12, 1/6, 1/3, and 5/12, respectively
9.3.2: 1 black olive, 6 green olives
9.3.3: π
9.3.4: 84503094584000000.01

Problem 10.0.1: A person born in 1806 was 43 years old in the year 1849, and $1849=43^2$. What is the last year in which a person born in that year will be *n* years old in the year n^2 , and those years are in the same century?

Problem 10.0.2: Chicken McNuggets come in boxes of 6, 9, or 20. What is the largest number of McNuggets that *can't* be ordered exactly?

Problem 10.0.3: What is the area of the largest equilateral triangle that will fit inside a unit square?



Send pens, solutions, precipitates, articles, prepositions, alumni news, alumni gnus, or suggestions to Heather (hlewis5@naz.edu) or Matt (mkoetz1@naz.edu).