

The Almagest

The bi-weekly newsletter of the Alma College Department of Mathematics and Computer Science. Your trusted source for news.

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Important Dates for SENIORS

This is the final term for all seniors, and there are several very important dates to circle on your calendars. Here they are:

- Feb. 13:** MFAT test If you scored sufficiently high on the fall test, there's no need to take this test.
- Feb. 14:** MFAT test If you scored sufficiently high on the fall test, there's no need to take this test.
- Feb. 16:** **Your paper is due.**
- March 13:** Sr. Presentation
4:00 *Chase Shultz*
5:30 Senior dinner in Heather Room
- March 15:** Senior Presentations
4:00 *Alex Bieri*
4:30 *Kevin Essenmacher*
- March 20:** Senior Presentations
4:00 *Rendrall Banford*
4:30 *Nick Fuller*

Math Competition – April 7th

The *Lower Michigan Math Competition* will be held on **Saturday, April 7th**, at Hillsdale College. This is a team-oriented competition similar to the MATH Challenge that we sponsor in the fall term. If you're interested in participating, please let Prof. Sipka know ASAP.



Two REU's To Consider

Over the past few weeks, I've received several emails advertising REU's in math. Here are two you might want to consider:

The **U of M – Dearborn** is sponsoring a program that focuses on *Mathematical Analysis, Algebraic Music Theory, and Their Applications*. The application deadline is **March 1st**. For more info, visit: <https://sites.google.com/a/umich.edu/math-reu/>

Grand Valley State University is sponsoring an REU that focuses on *Circle Packing, Graph Coloring, Referendum Elections, and Geometry*. The application deadline is **February 16th**. For more info, visit: <https://www.gvsu.edu/mathreu/>

The Math Club – Now on Thursdays

This term the Math Club will be meeting on **Thursday evenings** at 9 pm in DOW 132. All lovers of mathematics are encouraged to attend. And even if you simply *like* math, your presence is valued.



Careers in Math: Investment Analyst

Mathematics trains the mind to approach and solve problems in a unique fashion. Thus, an undergraduate degree in mathematics is typically viewed as an asset in many occupations. Previously discussed here have been the careers of biostatisticians and market research analysts. Another career that many mathematics majors find especially appealing is that of the investment analyst. *(continued on back)*

Investment analysts typically research, model, and report on the performance of specific types of stocks, bonds, and various other investment options. In doing so, they often provide buy-and-sell recommendations for those directly helping clients or large institutions. Therefore, these professionals are most commonly employed by banks, brokerages, money management firms, hedge funds, and the likes.

Skills which are important for investment analysts are those generally portrayed by people who have obtained a degree in mathematics or several other strict fields of thought. Such skills include those related to computation, analytics, computer software, and being detail oriented in nature. Additionally, oral and written communication skills are beneficial in conveying findings to others.

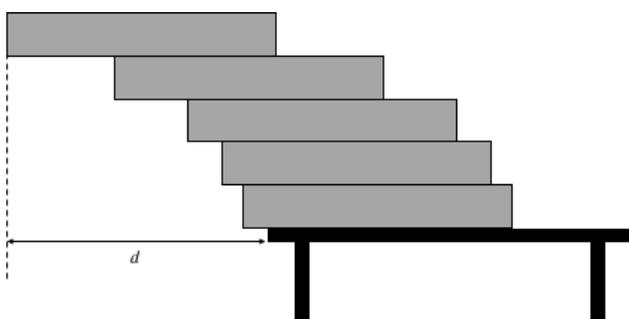
Most entry-level positions in this field require only a bachelor's degree in finance, economics, mathematics, or some other heavily analytical field. Junior analysts can usually then work their way up the chain as they learn the ins-and-outs of the profession under guidance of others. In some cases individuals return to school to complete a graduate program.

According to the Bureau of Labor Statistics the following is true of the larger category of financial analysts. In 2016 the median pay was \$81,760 and approximately 296,100 individuals were employed under this title. The projected job outlook between 2016 and 2026 is an increase of 11%. That is faster than average for all occupations. *Cheyenne Kalfsbeek*

Solution to Previous Puzzle

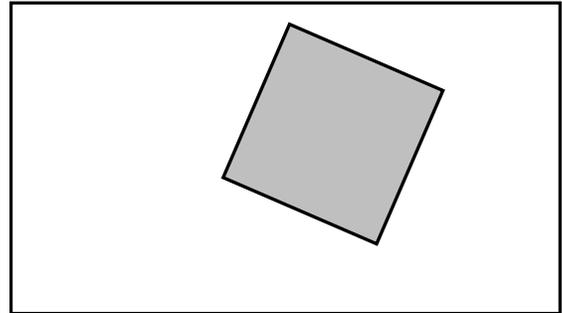
A correct solution to the previous puzzle, how far can you stack five identical 12-inch boxes over the end of a table, was submitted by **Eric Ferrara**. Eric correctly calculated the distance to be:

13.7 inches



Puzzle of the Bi-week

On a standard-sized sheet of paper, a square is drawn whose side lengths are smaller than the smaller dimension of the paper. Your goal is to cut out this square, precisely, with a ***single straight cut*** using scissors. You are allowed to fold the paper. Explain how to do it.



A prize of **\$2.00** will be awarded to the 1st student who submits a correct solution to Prof. Sipka.

Student assistant:	Cheyenne Kalfsbeek
Faculty advisor:	Tim Sipka
Distribution:	Jackie Gage SAC 224

If you would like to submit an announcement or a short article, please send it via e-mail to Tim Sipka (sipka@alma.edu).