

mathnews

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KME Corner

Five student members of FSU's Maryland Delta Chapter of Kappa Mu Epsilon attended the Great Lakes Regional KME Conference which was held at Wheeling Jesuit University on April 7. Three members gave presentations, namely, Emma Seibert on Tessellations and the Golden Ratio, Sarah Sparks on Euler's Polyhedral Formula, and Alissa Whiteley on Elliptic Curve Cryptography.

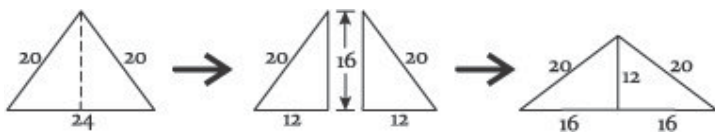
Elections were held during the group's April 26 meeting. New officers will be Demetrick McDonald as President, Braden Ebersole as Vice President, Jordan Thomas as Secretary, and Zach Kline as Treasurer.

All members are invited to attend the year-end picnic from 11:00 to 1:00 on May 16 (Reading Day) at the pavilion in Glendenning Park located behind Frost Elementary School. An announcement with directions will be sent out prior to the event.

Sliding Solution

For the first part of February's question, the maximum area occurs when the angle between the sides is a right angle. When the angle is a right angle, both the base and height of the triangle are 20 units, so the area is 200 square units, which is slightly more than the 192 square units of the original triangle.

For the second part of the question, note that if you bisect the original triangle, divide it into two right triangles, and rearrange the pieces, you can form a new triangle with exactly the same area.



The original triangle had a height of 16 and a base of 24, so its area is $\frac{1}{2}(16)(24) = 192$ square units. Likewise, the new triangle has a height of 12 and a base of 32, so its area is also $\frac{1}{2}(12)(32) = 192$ square units.

If you like, you may of course employ a modicum of trigonometry for alternative courses to the same solutions.

A Little Fun, Summer Number Theory

Supposing m and n are positive integers, solve $m^n = n^m$.

Congrats to Graduating Seniors

Jonathon Grams, Joshua Mason, Emma Seibert, Sarah Sparks, Daniel Steel, Jesse Toney, James West, and Alissa Whiteley.

Benjamin Forrest wins Newman Award

FSU sophomore *Benjamin Forrest* was chosen by Campus Compact to be honored as the 2018 Newman Civic Fellow, which acknowledges motivation and potential in public leadership. Forrest is one of the 268 students who were honored among all Campus Compact institutions.

Forrest, of Hagerstown, is a double major in political science and mathematics. He is the Student Affairs Committee chair in the FSU Student Government Association this year and was recently elected president of SGA for next year. He is also a student alumni ambassador, helping to build connections between alumni and the current student body.

"On campus, my focus is advocating for students' interests and well-being, and doing what I can to build bridges that can mitigate the political polarization that is dividing our country," Forrest said. "In the community, I am committed to partnerships to address poverty and the hurdles it presents for those who are trying to create better lives for themselves and their families."

Department Chair Steps Down

After nine years, the mathematics department is bidding a reluctant farewell to Dr. Marc Michael as Department Chair. He has been a caring and patient leader who always listened and responded positively to anyone who asked for his help. As Chair, Dr. Michael increased scholarships for students, enhanced the department's recruitment and retention efforts, created a math department Facebook page, organized social events such as meet-and-greets and math movie nights, and changed the course numbers for some classes to help advisors better understand course levels and sequences. Further, it was under his leadership that FSU became a host site for a sectional meeting of the Mathematical Association of America.

Dr. Michael attributes his success to the inspiration from his mentors (Dr. Richard Weimer and Dr. Karen Parks), his own ideas and energy, good relationships with two Deans and four Provosts, and the positive contributions from his faculty colleagues. He believes that his legacy is in hiring a group of new faculty (including Dr. Justin Dunmyre, the incoming Chair) who have been enthusiastic and significant contributors to the department and FSU. He wants everyone to know that he truly appreciated the opportunity to serve as Chair of the department for nine years, but the reality is that the department is even more grateful to have been led by him.

Fortunately for FSU students, Dr. Michael will return to teaching full time in the fall.