

math news

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New Name

MATH NEWS is excited to welcome Dr. Justin Dunmyre and his wife Elizabeth to Frostburg. Originally from Murrysville, PA, he earned a B.S. in Mathematics and Computer Science from Penn State, and an M.A. and a Ph.D. in Mathematics from the University of Pittsburgh.

Dr. Dunmyre comes from a post-doc appointment at the University of Michigan, with a specialty in Applied Mathematics, particularly medical applications. He'll be discussing some of his research at the next KME meeting.

An aficionado of video games and board games, he will be involved also in the department's Meet and Greet games on Monday. Other hobbies include watching the Penguins play hockey and spending time at Deep Creek Lake.

Everyone Talks about the Weather, but...

If one day's weather can be used to predict the next day's weather, according to the conditional probabilities given in the table,

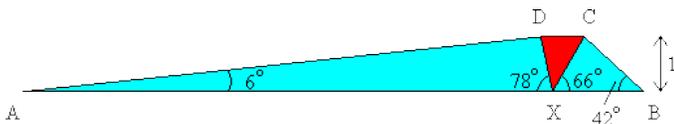
		Tomorrow	
		DRY	WET
To-day	DRY	.6	.4
	WET	.2	.8

then we can find the likelihood that Sunday is dry given that Friday is dry as follows:

$$\begin{aligned}
 & P(\text{dry Sun} \mid \text{dry Fri}) \\
 &= [P(\text{dry Sun} \mid \text{dry Sat})] [P(\text{dry Sat} \mid \text{dry Fri})] \\
 &+ [P(\text{dry Sun} \mid \text{wet Sat})] [P(\text{wet Sat} \mid \text{dry Fri})] \\
 &= (0.6)(0.6) + (0.2)(0.4) \\
 &= 0.44.
 \end{aligned}$$

Triangle in a Trapezoid

In trapezoid ABCD shown, with sides AB and CD parallel, angle DAB = 6° and angle ABC = 42° . Point X on side AB is such that angle AXD = 78° and angle CXB = 66° . If AB and CD are 1 inch apart, prove that $AD + DX - (BC + CX) = 8$ inches.



KME Corner

Kappa Mu Epsilon will meet on Thursday, September 26th at 6:00 PM in Dunkle 202. Dr. Dunmyre will be speaking. All students and faculty are welcome to attend.

Free Food, Fun, and Fellowship

The department's approximately-annual Meet and Greet is set for Monday, September 16th from 5:00 to 8:00 pm across University Drive in the Osborne Newman Center. The event is open to, and encouraged for, all STEM field majors.

Seminar Offered

Dr. Anthony Dukes will be visiting to present the year's first mathematics seminar, "An Introduction to Mathematical Games" on Wednesday, September 25th at 6:30 PM in Compton Science Center, Room 226.

Game theory is a mathematical means to model strategic interactions among people and organizations. This talk introduces game theory and illustrates its application to the fields of business and economics.

Dr. Dukes is an Associate Professor of Marketing at the University of Southern California in Los Angeles. In his research, he applies game theory to understand firms' marketing strategies, particularly as it applies to pricing, retail and distribution channels, and antitrust. He has a PhD in Economics from the University of Pittsburgh and an MS in Mathematics from West Virginia University.

President to Speak

Linda Gojak, President of the National Council of Teachers of Mathematics, will give a presentation entitled "Everything You Do in Mathematics Should Make Sense" on Thursday, October 3rd, at 7:00 pm in the Cordts PEC Hall of Fame Room. The talk will be appropriate for mathematics majors, mathematics minors, pre-service teachers (of all levels), and in-service teachers (of all levels).

Advice for Success in Mathematics

Mathematics students are invited to check out <http://mathcs.slu.edu/undergrad-math/success-in-mathematics>, which offers great advice on math study skills, problem solving, studying for a math test, taking a math test, and getting assistance.