



Math Mole

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Third Test Day

Volume 4, No. 2

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- Today's Editor: Jonathan
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- Later: Corey, Mark

Puzzle1: There are two bugs on a 4×4 grid. The bug on point B is trying to get to point A, and the bug on point A is trying to get to point B. The bug on point A can only move up and right, the one on point B can only move down and left. Whenever the bug has 2 possible directions of movement, the probability that it will go either way is equal. What is the probability that they will meet?

				B
A				

Puzzle2: My grandson is as many days old as my son is weeks, and my grandson is as many months as I am in years. My grandson, my son and I together are 140 years. Can you tell me my age in years?

Mathematician of the Day



Blaise Pascal- 1623-1662, France

- Blaise Pascal was the third of Étienne Pascal's children and his only son. Etienne decided that Blaise was not to study mathematics before the age of 15. However, Blaise started to work on geometry himself at the age of 12. He discovered that the sum of the angles of a triangle are two right angles and, when his father found out, he relented and allowed Blaise a copy of Euclid.
- Pascal invented the first digital calculator to help his father with his work collecting taxes. He worked on it for three years between 1642 and 1645. The device, called the Pascaline, resembled a mechanical calculator of the 1940's. This calculator was only the second of its kind.
- He worked on conic sections and produced important theorems in projective geometry in *The Generation of Conic Section*.
- Although Pascal was not the first to study the Pascal triangle, his work on the topic in *Treatise on the Arithmetical Triangle* was the most important on this topic.
- Pascal's work on binomial coefficients led Newton to his discovery of the general binomial theorem for fractional and negative powers.
- In correspondence with Fermat he laid the foundation for the theory of probability. They considered the dice and points problem, considered by Cardan.

Notes

Outline

Exam 3

Graph Theory

Homework: Read Chapter 2 from Graph Theory