



Math Mole

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End of GSS

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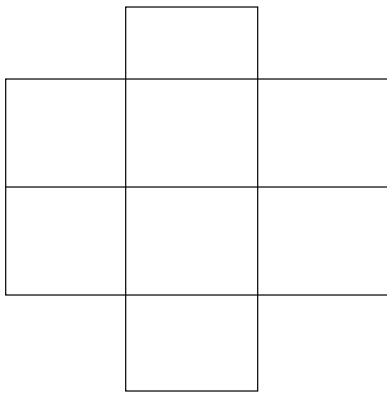
This issue

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- Class Outline
- Today's Editor: Michael

Puzzle1: We were going by train from Anglechester to Clinkerton, and an hour after starting an accident happened to the engine.

We had to continue the journey at three-fifths of the former speed. It made us two hours late at Clinkerton, and the driver said that if only the accident had happened fifty miles farther on the train would have arrived forty minutes sooner. Can you tell from that statement just how far it is from Anglechester to Clinkerton?

Puzzle2: Insert the numbers from 1 through 8 in the eight boxes, one digit to a box, in such a manner that there are no consecutive numbers next to each other, horizontally, vertically, or diagonally.



Mathematician of the Day



Leonhard Euler - Switzerland 1707-1783

- Leonhard Euler was born April 15, 1707. He was raised in Basal, Switzerland and received his higher level education at the University of Basal. The school provided little education in the field of mathematics, so Euler chose to teach himself through his own reading and taking of private lessons. His affinity for math was recognized at an early age and he was considered to be a child prodigy.
- At the age of 30, having been called upon by Catherine I of Russia, Euler became a professor of physics and later professor of mathematics in St. Petersburg. In 1741 Euler moved to Berlin to become director of the mathematical class at the Prussian Academy of Sciences. As an example to the output of his work on mathematics while in Berlin, Euler produced over 380 articles concerning topics such as calculus of variations, planetary orbits, shipbuilding and navigation, motion of the moon and differential calculus. In 1766, however, he left Berlin and returned to St. Petersburg where he remained the rest of his life.
- Between 1766 and 1771, Euler endured a serious illness which ultimately left him blind. But even after his blindness, Euler was able to continue to study mathematics. Half of his lifetime work was in fact written after he became totally blind. This was made possible by the assistance of his sons.
- In 1783, Leonhard Euler died in St. Petersburg after suffering a hemorrhage in the brain.
- The total amount of work produced by Euler in his lifetime can fill more than seventy volumes of text. For this he is considered to be the most prolific mathematician in history (as well as one of the greatest).
- His work covered areas of math including calculus of variations, analysis, number theory, algebra, geometry, trigonometry, analytical mechanics, hydrodynamics, and lunar theory.
- Euler was considered to be the first mathematician to use the term "function."
- He is known for discovering the formula relating the number of faces, edges, and vertices of a polyhedron ($F + V = E + 2$) as well as the equation $e^{i\pi} + 1 = 0$ which connects five fundamental numbers in mathematics.
- He solved the seven bridges of Konigsburg puzzle — one of the first applications of graph theory in his *Solutio problematis ad geometriam situs pertinentis*
- He also wrote *Tentamen novae theoriae musicae* — an attempt to combine mathematics and music.

Notes

Outline

Pizza

Awards

Games

Homework: Make it a memorable talent show!