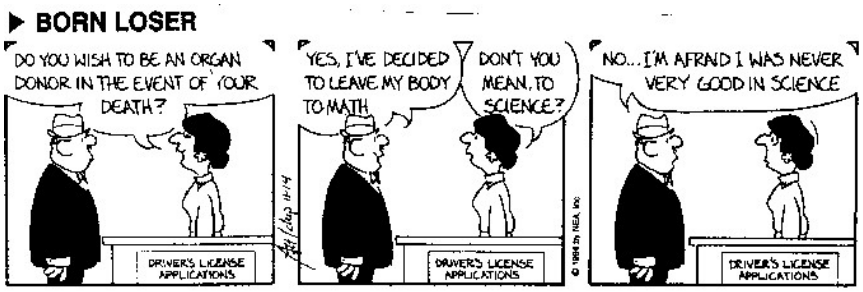
$$x^4-8184x^3+25144736x^2-34251153024x+17515362723840=0$$



January

1	**1**	T	(1803) Guglielmo LIBRI Carucci dalla Sommaja (1878) Agner Krarup ERLANG (1894) Satyendranath BOSE (1912) Boris GNEDENKO
	2	F	(1822) Rudolf Julius Emmanuel CLAUSIUS (1905) Lev Genrichovich SHNIRELMAN (1938) Anatoly SAMOILENKO
	3	S	(1917) Yuri Alexeievich MITROPOLSHY
	4	S	(1643) Isaac NEWTON
2	**5**	M	(1838) Marie Ennemond Camille JORDAN (1871) Federigo ENRIQUES (1871) Gino FANO
	6	T	(1807) Jozeph Mitza PETZVAL (1841) Rudolf STURM
	7	W	(1871) Felix Edouard Justin Emile BOREL (1907) Raymond Edward Alan Christopher PALEY
	8	T	(1888) Richard COURANT (1924) Paul Moritz COHN (1942) Stephen William HAWKING
	9	F	(1864) Vladimir Adreievich STELKOV
	10	S	(1875) Issai SCHUR (1905) Ruth MOUFANG
	11	S	(1545) Guidobaldo DEL MONTE (1707) Vincenzo RICCATI (1734) Achille Pierre Dionis DU SEJOUR
3	**12**	M	(1906) Kurt August HIRSCH
	13	T	(1864) Wilhelm Karl Werner Otto Fritz Franz WIEN (1876) Luther Pfahler EISENHART (1876) Erhard SCHMIDT
	14	W	(1902) Alfred TARSKI
	15	T	(1704) Johann CASTILLON (1717) Mattew STEWART (1850) Sofia Vasilievna KOVALEVSKAJA
	16	F	(1801) Thomas KLAUSEN
	17	S	(1847) Nikolay Egorovich ZUKOWSKY (1858) Gabriel KOENIGS
	18	S	(1856) Luigi BIANCHI (1880) Paul EHRENFEST
4	**19**	M	(1813) Rudolf Friedrich Alfred CLEBSCH (1879) Guido FUBINI (1908) Aleksandr Gennadievich KUROS
	20	T	(1775) Andre` Marie AMPERE (1895) Gabor SZEGO (1904) Renato CACCIOPPOLI
	21	W	(1846) Pieter Hendrik SCHOUTE (1915) Yuri Vladimirovich LINNIK
	22	T	(1592) Pierre GASSENDI (1908) Lev Davidovich LANDAU
	23	F	(1840) Ernst ABBE (1862) David HILBERT
	24	S	(1891) Abram Samoilovitch BESICOVITCH (1914) Vladimir Petrovich POTAPOV
	25	S	(1627) Robert BOYLE (1736) Joseph-Louis LAGRANGE (1843) Karl Herman Amandus SCHWARTZ
5	**26**	M	(1799) Benoit Paul Emile CLAPEYRON
	27	T	(1832) Charles Lutwidge DODGSON
	28	W	(1701) Charles Marie de LA CONDAMINE (1892) Carlo Emilio BONFERRONI
	29	T	(1817) William FERREL (1888) Sidney CHAPMAN
	30	F	(1619) Michelangelo RICCI
	31	S	(1715) Giovanni Francesco FAGNANO dei Toschi (1841) Samuel LOYD (1896) Sofia Alexandrovna JANOWSKAJA

USAMO 1994 [1]

Let $k_1<k_2<k_3<\ldots$ be positive integers, no two consecutive, and let $s_m= k_1+k_2+\ldots+k_m$ for $m=1;2;\ldots;m$. Prove that, for each positive integer n, the interval $(s_n;s_{n+1})$ contains at least one perfect square.

Why Slide Rule, Pencil and Paper are Better than a Workstation

A Slide Rule doesn't shut down abruptly when it gets too hot.

The Wonderful Word of Statistics

1. Ten percent of all car thieves are left-handed
2. All polar bears are left-handed

➢ If your car is stolen, there's a 10 percent chance it was nicked by a Polar bear

Someone told me that each equation I included in the book would halve its sales.

Stephen William HAWKING

Physics is becoming too difficult for the physicists.

David HILBERT

The proof of the Hilbert Basis Theorem is not mathematics; it is theology.

Camille JORDAN

Say what you know, do what you must, come what may.

Sofia Vasilievna KOVALEVSKAJA

When we ask advice, we are usually looking for an accomplice.

Joseph-Louis LAGRANGE

It gives me the same pleasure when someone else proves a good theorem as when I do it myself.

Lev Davidovich LANDAU

I have no certainties, at most probabilities.

Renato CACCIOPPOLI

"When I use a word," Humpty Dumpty said, in a rather scornful tone, "it means just what I choose it to mean - neither more nor less."

"The question is," said Alice, "whether you can make words mean so many different things."

"The question is," said Humpty Dumpty, "which is to be master - that's all."

Charles DODGSON

February

5	**1**	S	(1900) John Charles BURKILL
6	**2**	M	(1522) Lodovico FERRARI
	3	T	(1893) Gaston Maurice JULIA
	4	W	(1905) Eric Cristopher ZEEMAN
	5	T	(1757) Jean Marie Constant DUHAMEL
	6	F	(1612) Antoine ARNAULD (1695) Nicolaus (II) BERNOULLI
	7	S	(1877) Godfried Harold HARDY (1883) Eric Temple BELL
	8	S	(1700) Daniel BERNOULLI (1875) Francis Ysidro EDGEWORTH
7	**9**	M	(1775) Farkas Wolfgang BOLYAI (1907) Harod Scott MacDonald COXETER
	10	T	(1747) Aida YASUAKI
	11	W	(1800) William Henry Fox TALBOT (1839) Josiah Willard GIBBS (1915) Richard Wesley HAMMING
	12	T	(1914) Hanna CAEMMERER NEUMANN
	13	F	(1805) Johann Peter Gustav Lejeune DIRICHLET
	14	S	(1468) Johann WERNER (1849) Hermann HANKEL (1896) Edward Artur MILNE
	15	S	(1564) Galileo GALILEI (1861) Alfred North WHITEHEAD (1946) Douglas HOFSTADTER
8	**16**	M	(1822) Francis GALTON (1853) Georgorio RICCI-CURBASTRO (1903) Beniamino SEGRE
	17	T	(1890) Sir Ronald Aymler FISHER (1891) Adolf Abraham Halevi FRAENKEL
	18	W	(1404) Leon Battista ALBERTI
	19	T	(1473) Nicolaus COPERNICUS
	20	F	(1844) Ludwig BOLTZMANN
	21	S	(1591) Girard DESARGUES (1915) Evgenni Michailovitch LIFSHITZ
	22	S	(1903) Frank Plumpton RAMSEY
9	**23**	M	(1583) Jean-Baptiste MORIN (1951) Shigefumi MORI
	24	T	(1871) Felix BERNSTEIN
	25	W	(1827) Henry WATSON
	26	T	(1786) Dominique Francois Jean ARAGO
	27	F	(1881) Luitzen Egbertus Jan BROUWER
	28	S	(1735) Alexandre Theophile VANDERMONDE
	29	S	(1860) Herman HOLLERITH

USAMO 1994 [2]

The sides of a 99-gon are initially coloured so that consecutive sides are red, blue, red, blue,..., red, blue, yellow. We make a sequence of modifications in the colouring, changing the colour of one side at a time to one of the three given colours (red, blue, yellow), under the constraint that no two adjacent sides may be the same colour. By making a sequence of such modifications, is it possible to arrive at the colouring in which consecutive sides are red, blue, red, blue, red, blue,..., red, yellow, blue?

Why Slide Rule, Pencil and Paper are Better than a Workstation

One hundred people all using Slide Rules and Paper Pads do not start wailing and screaming due to a single-point failure.

If you have a cross-CAP on your sphere,
And you give it a circle-shaped tear,
Then just shake it about
And untangle it out
And a Moebius strip will appear!

Measure what is measurable, and make measurable what is not so.

Galileo GALILEI

Whenever you can, count.

Francis GALTON

Mathematics *is* a language

Josiah Willard GIBBS

Mathematics is an interesting intellectual sport but it should not be allowed to stand in the way of obtaining sensible information about physical processes.

Richard Wesley HAMMING

In most sciences one generation tears down what another has built, and what one has established, another undoes. In mathematics alone each generation adds a new store to the old structure.

Hermann HANKEL

I am interested in mathematics only as a creative art.

Godfried Harold HARDY

March

10	**1**	M	(1611) John PELL
	2	T	(1836) Julius WEINGARTEN
	3	W	(1838) George William HILL (1845) Georg CANTOR
	4	T	(1822) Jules Antoine LISSAJUS
	5	F	(1512) Gerardus MERCATOR (1759) Benjamin GOMPERTZ (1817) Angelo GENOCCHI
	6	S	(1866) Ettore BORTOLOTTI
	7	S	(1792) William HERSCHEL (1824) Delfino CODAZZI
11	**8**	M	(1851) George CHRYSTAL
	9	T	(1818) Ferdinand JOACHIMSTHAL (1900) Howard Hathaway AIKEN
	10	W	(1864) William Fogg OSGOOD
	11	T	(1811) Urbain Jean Joseph LE VERRIER (1853) Salvatore PINCHERLE
	12	F	(1685) George BERKELEY (1824) Gustav Robert KIRKHHOFF (1859) Ernesto CESARO
	13	S	(1861) Jules Joseph DRACH (1957) Rudy D'ALEMBERT
	14	S	(1864) Jozef KURSCHAK (1879) Albert EINSTEIN
12	**15**	M	(1860) Walter Frank Raphael WELDON (1868) Grace CHISOLM YOUNG
	16	T	(1750) Caroline HERSCHEL (1789) Georg Simon OHM (1846) Magnus Gosta MITTAG-LEFFLER
	17	W	(1876) Ernest Benjamin ESCLANGON (1897) Charles FOX
	18	T	(1640) Philippe de LA HIRE (1690) Christian GOLDBACH (1796) Jacob STEINER
	19	F	(1862) Adolf KNESER (1910) Jacob WOLFOWITZ
	20	S	(1840) Franz MERTENS (1884) Philip FRANCK (1938) Sergi Petrovich NOVIKOV
	21	S	(1768) Jean Baptiste Joseph FOURIER (1884) George David BIRKHOFF
13	**22**	M	(1917) Irving KAPLANSKY
	23	T	(1754) Georg Freiherr von VEGA (1882) Emmy Amalie NOETHER (1897) John Lighton SYNGE
	24	W	(1809) Joseph LIOUVILLE (1948) Sun-Yung (Alice) CHANG
	25	T	(1538) Christopher CLAUSIUS
	26	F	(1848) Konstantin ADREEV (1913) Paul ERDOS
	27	S	(1857) Karl PEARSON
	28	S	(1749) Pierre Simon de LAPLACE
14	**29**	M	(1825) Francesco FAA` DI BRUNO (1873) Tullio LEVI-CIVITA (1896) Wilhelm ACKERMAN
	30	T	(1892) Stefan BANACH
	31	W	(1596) Rene` DESCARTES

USAMO 1994 [3]

A convex hexagon ***ABCDEF*** is inscribed in a circle such that ***AB=CD=EF*** and diagonals ***AD***, ***BE*** and ***CF*** are concurrent. Let ***P*** be the intersection of ***AD*** and ***CE***. Prove that $CP/PE=(AC/CE)^2$.

Why Slide Rule, Pencil and Paper are Better than a Workstation

A Slide Rule doesn't smoke whenever the power supply hiccups. And a Slide Rule doesn't care if you smoke, or hiccup.

When I set k equal to 0,
I can be a mathematical hero:
If I should decide
By k to divide,
Then it's clear that 1 = 0.

We [he and Halmos] share a philosophy about linear algebra: we think basis-free, we write basis-free, but when the chips are down we close the office door and compute with matrices like fury.

Irving KAPLANSKY

Nature laughs at the difficulties of integration.

Pierre-Simon de LAPLACE

The mathematician's best work is art, a high perfect art, as daring as the most secret dreams of imagination, clear and limpid. Mathematical genius and artistic genius touch one another.

Magnus Gosta MITTAG-LEFFLER

A mathematician is a person who can find analogies between theorems; a better mathematician is one who can see analogies between proofs and the best mathematician can notice analogies between theories. One can imagine that the ultimate mathematician is one who can see analogies between analogies.

Stefan BANACH

The essence of mathematics lies in its freedom.

Georg CANTOR

This has been done elegantly by Minkowski; but chalk is cheaper than grey matter, and we will do it as it comes.

Albert EINSTEIN

April

14	**1**	T	(1640) Georg MOHR (1776) Marie-Sophie GERMAIN (1895) Alexander Craig AITKEN
	2	F	(1934) Paul Joseph COHEN
	3	S	(1835) John Howard Van AMRINGE (1892) Hans RADEMACHER (1900) Albert Edward INGHAM (1909) Stanislaw Marcin ULAM (1971) Alice RIDDLE
	4	S	(1809) Benjamin PEIRCE (1842) Francois Edouard Anatole LUCAS (1949) Shing-Tung YAU
15	**5**	M	(1588) Thomas HOBBES (1607) Honore` FABRI (1622) Vincenzo VIVIANI (1869) Sergi Alexeievich CHAPLYGIN
	6	T	
	7	W	(1768) Francais Joseph FRANCAIS
	8	T	(1903) Marshall Harvey STONE
	9	F	(1791) George PEACOCK (1816) Charles Eugene DELAUNAY (1919) John Presper HECKERT
	10	S	(1857) Henry Ernest DUDENEY
	11	S	(1953) Andrew John WILES
16	**12**	M	(1794) Germinal Pierre DANDELIN (1852) Carl Louis Ferdinand Von LINDEMANN (1903) Jan TINBERGEN
	13	T	(1728) Paolo FRISI (1813) Duncan Farquharson GREGORY (1879) Francesco SEVERI
	14	W	(1629) Christiaan HUYGENS
	15	T	(1452) Leonardo da VINCI (1548) Pietro Antonio CATALDI (1707) Leonhard EULER (1809) Herman Gunther GRASSMANN
	16	F	(1682) John HADLEY (1823) Ferdinand Gotthold Max EISENSTEIN
	17	S	(1798) Etienne BOBILLIER (1853) Arthur Moritz SCHONFLIES
	18	S	(1907) Lars Valerian AHLFORS (1918) Hsien Chung WANG (1949) Charles Luois FEFFERMAN
17	**19**	M	(1880) Evgeny Evgenievich SLUTSKY (1883) Richard VIN MISES (1901) Kiyoshi OKA (1905) Charles EHRESMANN
	20	T	(1839) Francesco SIACCI
	21	W	(1652) Michel ROLLE (1774) Jean Baptiste BIOT (1875) Teiji TAKAGI
	22	T	(1811) Otto Ludwig HESSE (1887) Harald August BOHR
	23	F	(1858) Max Karl Ernst Ludwig PLANCK
	24	S	(1863) Giovanni VAILATI
	25	S	(1849) Felix Christian KLEIN (1900) Wolfgang PAULI (1903) Andrei Nicolayevich KOLMOGOROV
18	**26**	M	(1889) Ludwig Josef Johan WITTENGSTEIN
	27	T	(1755) Marc-Antoine PARSEVAL des Chenes
	28	W	(1906) Kurt GODEL
	29	T	(1854) Jules Henri POINCARE`
	30	F	(1777) Johann Carl Friedrich GAUSS (1916) Claude Elwood SHANNON

USAMO 1994 [4]

Let a_1, a_2, a_3,... a sequence of positive real numbers satisfying $\sum_{j=1}^{n} a_j \geq \sqrt{n}$ for all $n \geq 1$. Prove that, for all $n \geq 1$, $\sum_{j=1}^{n} a_j^2 > \frac{1}{4}\left(1+\frac{1}{2}+\ldots+\frac{1}{n}\right)$

Why Slide Rule, Pencil and Paper are Better than a Workstation

You can spill coffee on a Slide Rule; you can even use a Slide Rule to stir coffee.

The Wonderful Word of Statistics

1. 39 percent of unemployed men wear spectacles
2. 80 percent of employed men wear spectacles

➢ Work stuffs up your eyesight

The total number of Dirichlet's publications is not large: jewels are not weighed on a grocery scale.

Carl Frederich GAUSS

In describing the honourable mission I charged him with, M. Pernety informed me that he made my name known to you. This leads me to confess that I am not as completely unknown to you as you might believe, but that fearing the ridicule attached to a female scientist, I have previously taken the name of M. LeBlanc in communicating to you those notes that, no doubt, do not deserve the indulgence with which you have responded.

Sophie GERMAIN

[He] gave a formal demonstration of the inadequacy of formal demonstrations.

Anonymous, about Kurt GODEL

The presentation of mathematics in schools should be psychological and not systematic. The teacher, so to speak, should be a diplomat. He must take account of the psychic processes in the boy in order to grip his interest, and he will succeed only if he presents things in a form intuitively comprehensible. A more abstract presentation is only possible in the upper classes.

Felix KLEIN

May

18	**1**	S	(1825) Johann Jacob BALMER
	2	S	(1860) D`Arcy Wentworth THOMPSON (1905) Kazimierz ZARANKIEWITZ
19	**3**	M	(1842) Otto STOLZ (1860) Vito VOLTERRA
	4	T	(1845) William Kingdon CLIFFORD
	5	W	(1833) Lazarus Emmanuel FUCHS (1897) Francesco Giacomo TRICOMI
	6	T	(1872) Willem DE SITTER (1906) Andre` VEIL
	7	F	(1926) Alexis Claude CLAIRAUT (1854) Giuseppe VERONESE (1881) Ebenezer CUNNINGHAM (1896) Pavel Sergeievich ALEXANDROV
	8	S	(1859) Johan Ludwig William Valdemar JENSEN
	9	S	(1746) Gaspard MONGE (1876) Gilbert Ames BLISS
20	**10**	M	(1788) Augustin Jean FRESNEL (1847) William Karl Joseph KILLING (1958) Piotr Rizierovich SILVERBRAHMS
	11	T	(1918) Richard Phillips FEYNMAN
	12	W	(1845) Pierre Rene`Jean Baptiste Henry BROCARD (1902) Frank YATES
	13	T	(1750) Lorenzo MASCHERONI
	14	F	(1832) Rudolf Otto Sigismund LIPSCHITZ (1863) John Charles FIELDS
	15	S	(1939) Brian HARTLEY
	16	S	(1718) Maria Gaetana AGNESI (1821) Pafnuti Lvovi CHEBYSHEV
21	**17**	M	
	18	T	(1850) Oliver HEAVISIDE (1892) Bertrand Arthur William RUSSELL
	19	W	(1919) Georgii Dimitirievich SUVOROV
	20	T	(1861) Henry Seely WHITE
	21	F	(1471) Albrecht DURER (1792) Gustave Gaspard de CORIOLIS
	22	S	(1865) Alfred Cardew DIXON
	23	S	(1914) Lipa BERS
22	**24**	M	
	25	T	(1838) Karl Mikailovich PETERSON
	26	W	(1667) Abraham DE MOIVRE (1896) Yuri Dimitrievich SOKOLOV
	27	T	(1862) John Edward CAMPBELL
	28	F	(1676) Jacopo Francesco RICCATI (1710) Johann (II) BERNOULLI
	29	S	(1882) Harry BATEMAN
	30	S	(1814) Eugene Charles CATALAN
23	**31**	M	(1926) John KEMENY

USAMO 1995 [1]

Let p be an odd prime. The sequence (a_n), $n \geq 0$ is defined as follows: $a_0=0$, $a_1=1$, ..., $a_{p-2}=p-2$ and, for all $n \geq p-1$, a_n is the least positive number that does not form an arithmetic sequence of length p with any of the preceding terms. Prove that, for all n, a_n is the number obtained by writing n in base $p-1$ and reading the result in base p.

Why Slide Rule, Pencil and Paper are Better than a Workstation

A Slide Rule, Pencil and Paper fit in a briefcase with space left over for lunch or a change of underwear.

Mathematics: of sciences, queen
Has more rules than I've ever seen.
There are no exceptions,
Just number deceptions.
On calculators, I am quite keen.

Euclid for children is barbarous.

Oliver HEAVISIDE

Now one may ask, "What is mathematics doing in a physics lecture?" We have several possible excuses: first, of course, mathematics is an important tool, but that would only excuse us for giving the formula in two minutes. On the other hand, in theoretical physics we discover that all our laws can be written in mathematical form; and that this has a certain simplicity and beauty about it. So, ultimately, in order to understand nature it may be necessary to have a deeper understanding of mathematical relationships.
But the real reason is that the subject is enjoyable, and although we humans cut nature up in different ways, and we have different courses in different departments, such compartmentalization is really artificial, and we should take our intellectual pleasures where we find them.

Richard FEYNMAN

June

23	1	T	(1796) Sadi Leonard Nicolas CARNOT (1851) Edward Bailey ELLIOTT (1899) Edward Charles TITCHMARSH
	2	W	(1895) Tibor RADO`
	3	T	(1659) David GREGORY
	4	F	(1809) John Henry PRATT
	5	S	(1814) Pierre LAurent WANTZEL (1819) John Couch ADAMS
	6	S	(1436) Johann Muller REGIOMONTANUS (1857) Aleksandr Michailovitch LYAPUNOV (1906) Max ZORN
24	7	M	(1863) Edward Burr VAN VLECK
	8	T	(1625) Giovanni Domenico CASSINI (1858) Charlotte Angas SCOTT (1860) Alicia Boole STOTT
	9	W	(1885) John Edensor LITTLEWOOD
	10	T	(940) Mohammad ABU`L WAFA Al-Buzjani (1887) Vladimir Ivanovich SMIRNOV
	11	F	(1937) David Bryant MUMFORD
	12	S	(1888) Zygmunt JANYSZEWSKI
	13	S	(1831) James Clerk MAXWELL (1876) William Sealey GOSSET (Student) (1928) John Forbes NASH
25	14	M	(1736) Charles Augustin de COULOMB (1856) Andrei Andreyevich MARKOV (1903) Alonzo CHURCH
	15	T	(1640) Bernard LAMY (1894) Nikolai Gregorievich CHEBOTARYOV
	16	W	(1915) John Wilder TUKEY
	17	T	(1898) Maurits Cornelius ESCHER
	18	F	(1858) Andrew Russell FORSYTH (1884) Charles Ernest WEATHERBURN
	19	S	(1623) Blaise PASCAL (1902) Wallace John ECKERT
	20	S	(1873) Alfred LOEWY
26	21	M	(1781) Simeon Denis POISSON (1828) Giuseppe BRUNO
	22	T	(1860) Mario PIERI (1864) Hermann MINKOWSKY (1910) Konrad ZUSE
	23	W	(1912) Alan Mathison TURING
	24	T	(1880) Oswald VEBLEN
	25	F	(1908) William Van Orman QUINE
	26	S	(1824) William THOMPSON, Lord Kelvin (1918) Yudell Leo LUKE
	27	S	(1806) Augustus DE MORGAN
27	28	M	(1875) Henri Leon LEBESGUE
	29	T	(1888) Aleksandr Aleksandrovich FRIEDMANN
	30	W	(1791) Felix SAVART

USAMO 1995 [2]

A calculator is broken so that the only keys that still work are the ***sin***; ***cos***; ***tan***; $\boldsymbol{sin^{-1}}$; $\boldsymbol{cos^{-1}}$; and $\boldsymbol{tan^{-1}}$ buttons. The display initially shows ***0***. Given any positive rational number ***q***; show that pressing some finite sequence of buttons will yield ***q***. Assume that the calculator does real number calculations with infinite precision. All functions are in terms of radians.

Why Slide Rule, Pencil and Paper are Better than a Workstation

A properly used Slide Rule can perform pipelined **and** parallel operations. (Okay, you need a guru for this.)

The method of Diophantus
May cease to enchant us
After a life spent trying to gear 'em
To Fermat's Last theorem.

In my opinion, a mathematician, in so far as he is a mathematician, need not preoccupy himself with philosophy -- an opinion, moreover, which has been expressed by many philosophers.

Henri Jean LEBESGUE

A good mathematical joke is better, and better mathematics, than a dozen mediocre papers.

John Edensor LITTLEWOOD

My soul is an entangled knot,
Upon a liquid vortex wrought
By Intellect in the Unseen residing,
And thine doth like a convict sit,
With marlinespike untwisting it,
Only to find its knottiness abiding;
Since all the tools for its untying
In four-dimensional space are lying,
Wherein they fancy intersperses
Long avenues of universes,
While Klein and Clifford fill the void
With one finite, unbounded homaloid,
And think the Infinite is now at last destroyed.

James Klerk MAXWELLL

July

27	**1**	T	(1643) Gottfried Wilhelm von LEIBNIZ (1788) Jean Victor PONCELET
	2	F	(1820) William John Racquorn RANKINE (1852) William BURNSIDE
	3	S	(1807) Ernest Jean Philippe Fauque de JONQUIERE (1897) Jesse DOUGLAS
	4	S	(1906) Daniel Edwin RUTHERFORD (1917) Michail Samuilovich LIVSIC
28	**5**	M	
	6	T	(1849) Alfred Bray KEMPE
	7	W	(1816) Johann Rudolf WOLF (1906) William FELLER (1922) Vladimir Aleksandrovich MARCHENKO
	8	T	(1760) Christian KRAMP
	9	F	(1845) George Howard DARWIN
	10	S	(1862) Roger COTES (1868) Oliver Dimon KELLOGG
	11	S	(1857) Sir Joseph LARMOR (1890) Giacomo ALBANESE
29	**12**	M	(1875) Ernest Sigismund FISCHER (1895) Richard BUCKMINSTER FULLER
	13	T	(1527) John DEE (1741) Karl Friedrich HINDENBURG
	14	W	
	15	T	(1865) Wilhelm WIRTINGER (1906) Adolph Andrej Pavlovich YUSHKEVICH
	16	F	(1678) Jakob HERMANN (1903) Irmgard FLUGGE-LOTZ
	17	S	(1831) Victor Mayer Amedee` MANNHEIM (1837) Wilhelm LEXIS
	18	S	(1013) Hermann von REICHENAU (1635) Robert HOOKE (1853) Hendrich Antoon LORENTZ
30	**19**	M	(1768) Francois Joseph SERVOIS
	20	T	
	21	W	(1620) Jean PICARD (1848) Emil WEYR (1849) Robert Simpson WOODWARD
	22	T	(1784) Friedrich Wilhelm BESSEL
	23	F	(1775) Etienne Louis MALUS (1854) Ivan SLEZYNSKY
	24	S	(1851) Friedrich Herman SCHOTTKY (1871) Paul EPSTEIN (1923) Christine Mary HAMILL
	25	S	(1808) Johann Benedict LISTING
31	**26**	M	(1903) Kurt MAHLER
	27	T	(1667) Johann BERNOULLI (1801) George Biddel AIRY (1848) Lorand Baron von EOTVOS (1871) Ernst Friedrich Ferdinand ZERMELO
	28	W	(1954) Gerd FALTINGS
	29	T	
	30	F	
	31	S	(1704) Gabriel CRAMER (1712) Johann Samuel KOENIG

USAMO 1995 [3]

Given a non-isosceles, non-right triangle ABC; let O denote the centre of its circumscribed circle, and let A_1; B_1; and C_1 be the midpoints of sides BC; CA; and AB; respectively. Point A_2 is located on the ray OA_1 so that triangle OAA_1 is similar to triangle OA_2A. Points B_2 and C_2 on rays OB_1 and OC_1; respectively, are defined similarly. Prove that lines AA_2; BB_2; and CC_2 are concurrent, i.e. these three lines intersect at a point.

Why Slide Rule, Pencil and Paper are Better than a Workstation

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The Wonderful World of Statistics

1. A total of 4000 cans are opened around the world every second
2. Ten babies are conceived around the world every second

➢ Each time you open a can, you stand a 1 in 400 chance of falling pregnant

It is rare to find learned men who are clean, do not stink and have a sense of humour.

(Montesquieu about) Gottfried von LEIBNIZ

The imaginary number is a fine and wonderful resource of the human spirit, almost an amphibian between being and not being.

Gottfried von LEIBNIZ

Probability is a mathematical discipline whose aims are akin to those, for example, of geometry of analytical mechanics. In each field we must carefully distinguish three aspects of the theory:
(a) the formal logical content,
(b) the intuitive background,
(c) the applications.
The character, and the charm, of the whole structure cannot be appreciated without considering all three aspects in their proper relation.

William FELLER

August

31	**1**	S	(1861) Ivar Otto BENDIXSON (1881) Otto TOEPLITZ
32	**2**	M	(1856) Ferdinand RUDIO (1902) Mina Spiegel REES
	3	T	(1914) Mark KAC
	4	W	(1805) Sir William Rowan HAMILTON (1838) John VENN
	5	T	(1802) Niels Henrik ABEL
	6	F	(1638) Nicolas MALEBRANCHE (1741) John WILSON
	7	S	(1868) Ladislaus Josephowitsch BORTKIEWITZ
	8	S	(1902) Paul Adrien Maurice DIRAC
33	**9**	M	(1537) Francesco BAROZZI (Franciscus Barocius)
	10	T	(1602) Gilles Personne de ROBERVAL
	11	W	(1730) Charles BOSSUT (1842) Enrico D'OVIDIO
	12	T	(1882) Jules Antoine RICHARD (1887) Erwin Rudolf Josef Alexander SCHRODINGER
	13	F	(1625) Erasmus BARTHOLIN (1819) George Gabriel STOKES (1861) Cesare BURALI-FORTI
	14	S	(1530) Giovanni Battista BENEDETTI (1842) Jean Gaston DARBOUX (1865) Guido CASTELNUOVO (1866) Charles Gustave Nicolas de la VALLEE` POUSSIN
	15	S	(1863) Aleksei Nikolaevich KRYLOV (1892) Louis Pierre Victor duc de BROGLIE (1901) Petr Sergeevich NOVIKOV
34	**16**	M	(12773) Louis Beniamin FRANCOEUR (1821) Arthur CAYLEY
	17	T	(1601) Pierre de FERMAT
	18	W	(1685) Brook TAYLOR
	19	T	(1646) John FLAMSTEED (1739) Georg Simon KLUGEL
	20	F	(1710) Thomas SIMPSON (1863) Corrado SEGRE (1882) Waclav SIERPINSKI
	21	S	(1789) Augustin Louis CAUCHY
	22	S	(1647) Denis PAPIN
35	**23**	M	(1683) Giovanni POLENI (1829) Moritz Benedikt CANTOR
	24	T	(1561) Bartholomeo PITISCUS (1942) Karen Keskulla UHLENBECK
	25	W	(1561) Philip van LANSBERGE (1844) Thomas MUIR
	26	T	(1728) Johann Heinrich LAMBERT (1875) Giuseppe VITALI
	27	F	(1858) Giuseppe PEANO
	28	S	(1796) Irenee Jules BIENAYME`
	29	S	(1904) Leonard ROTH
36	**30**	M	(1856) Carle David Tolme` RUNGE (1906) Olga TAUSSKY-TODD
	31	T	(1821) Hermann Ludwig Ferdinand von HELMHOLTZ

USAMO 1995 [4]

Suppose q_0, q_1, q_2, ... is an infinite sequence of integers satisfying the following two conditions:

1. $m-n$ divides q_m-q_n for $m>n\geq 0$
2. there is a polynomial P such that $|q_n|<P(n)$ for all n.

Prove that there is a polynomial Q such that $q_n=Q(n)$ for all n.

Why Slide Rule, Pencil and Paper are Better than a Workstation

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Q: What's an Abelian group under addition, is closed, associative, distributive, and bears a curse?

A: The ring of the Nibelung

Who would not rather have the fame of Archimedes than that of his conqueror Marcellus?

Sir William Rowan HAMILTON

Whoever in the pursuit of science, seeks after immediate practical utility may rest assured that he seeks in vain.

Hermann Ludwig Ferdinand von HELMOLTZ

Steinhaus, with his predilection for metaphors, used to quote a Polish proverb, *'Forturny kolem sie tocza'* [Luck runs in circles], to explain why π, so intimately connected with circles, keeps cropping up in probability theory and statistics, the two disciplines which deal with randomness and luck.

Mark KAC

It appears to me that if one wishes to make progress in mathematics, one should study the masters and not the pupils.

Niels Henrik ABEL

In science one tries to tell people, in such a way as to be understood by everyone, something that no one ever knew before. But in poetry, it's the exact opposite.

Paul Adrien Maurice DIRAC

September

36	**1**	W	(1659) Joseph SAURIN (1835) William Stankey JEVONS
	2	T	(1878) Mauriche Rene` FRECHET (1923) Rene` THOM
	3	F	(1814) James Joseph SYLVESTER (1884) Solomon LEFSCHETZ (1908) Lev Semenovich PONTRYAGIN
	4	S	(1809) Luigi Federico MENABREA
	5	S	(1667) Giovanni Girolamo SACCHERI (1725) Jean Etienne MONTUCLA
37	**6**	M	(1859) Boris Jakovlevich BUKREEV (1863) Dimitri Aleksandrovich GRAVE
	7	T	(1707) George Louis Leclerc comte de BUFFON (1955) Efim ZELMANOV
	8	W	(1584) Gregorius SAINT-VINCENT (1588) Marin MERSENNE
	9	T	(1860) Frank MORLEY
	10	F	(1839) Charles Sanders PEIRCE
	11	S	(1623) Stefano degli ANGELI (1877) sir James Hopwood JEANS
	12	S	(1891) Antoine Andre` Louis REYNAUD (1900) Haskell Brooks CURRY
38	**13**	M	(1873) Constantin CARATHEODORY (1885) Wilhelm Johann Eugen BLASCHKE
	14	T	(1858) Henry Burchard FINE (1891) Ivan Matveevich VINOGRADOV
	15	W	(973) Abu Arrayhan Muhammad ibn Ahmad AL BIRUNI (1886) Paul Pierre LEVY
	16	T	(1494) Francisco MAUROLICO (1736) Johann Nikolaus TETENS
	17	F	(1743) Marie Jean Antoine Nicolas de Caritat de CONDORCET (1826) Georg Friedrich Bernhard RIEMANN
	18	S	(1752) Adrien Marie LEGENDRE
	19	S	(1749) Jean Baptiste DELAMBRE
39	**20**	M	(1842) Alexander Wilhelm von BRILL (1861) Frank Nelson COLE
	21	T	(1899) Juliusz Pawel SCHAUDER
	22	W	(1765) Paolo RUFFINI (1769) Louis PUISSANT (1803) Jaques Charles Francois STURM
	23	T	(1768) William WALLACE (1900) David van DANTZIG
	24	F	(1501) Girolamo CARDANO (1625) Johan DE WITT (1801) Michail Vasilevich OSTROGRADSKI
	25	S	(1819) George SALMON (1888) Stefan MAZURKIEWICZ
	26	S	(1688) Willem Jakob `s GRAVESANDE (1854) Percy Alexander MACMAHON (1891) Hans REICHENBACH
40	**27**	M	(1855) Paul Emile APPEL (1876) Earle Raymond HEDRICK (1919) James Hardy WILKINSON
	28	T	(1698) Pierre Louis Moreau de MAUPERTUIS (1761) Ferdinand Francois Desire` Budan de BOISLAURENT (1873) Julian Lowell COOLIDGE
	29	W	(1561) Adriaan van ROOMEN (1812) Adolph GOPEL
	30	T	(1775) Robert ADRAIN (1829) Joseph WOLSTENHOLME (1883) Ernst HELLINGER

USAMO 1995 [5]

Suppose that in a certain society, each pair of persons can be classified as either ***amicable*** or ***hostile***. We shall say that each member of an amicable pair is a ***friend*** of the other, and each member of a hostile pair is a ***foe*** of the other. Suppose that the society has n persons and q amicable pairs, and that for every set of three persons, at least one pair is hostile. Prove that there is at least one member of the society whose ***foes*** include $q\left(1-\frac{4q}{n^2}\right)$ or fewer amicable pairs.

Why Slide Rule, Pencil and Paper are Better than a Workstation

Slide Rules are designed to a standardized, open architecture and are immune to viruses, worms, and other depredations from hostile adolescents with telephones.

Q: What's one-sided and lives in the sea?

A: Mobius Dick.

From the intrinsic evidence of his creation, the Great Architect of the Universe begins to appear as a pure mathematician.

James Hopwood JEANS

It is clear that Economics, if it is to be a science at all, must be a mathematical science.

William JEVONS

If it's just turning the crank it's algebra, but if it's got an idea in it, it's topology.

Solomon LEFSCHETZ

How then shall mathematical concepts be judged? They shall not be judged. Mathematics is the supreme arbiter. From its decisions there is no appeal. We cannot change the rules of the game, we cannot ascertain whether the game is fair. We can only study the player at his game; not, however, with the detached attitude of a bystander, for we are watching our own minds at play.

David van DANTZIG

October

40	**1**	F	(1671) Luigi Guido GRANDI (1898) Bela KEREKJARTO`
	2	S	(1825) John James WALKER (1908) Arthur ERDELYI
	3	S	(1944) Pierre Rene` DELIGNE
41	**4**	M	(1759) Louis Francois Antoine ARBOGAST (1797) Jerome SAVARY
	5	T	(1732) Nevil MASKELYNE (1781) Bernhard Placidus Johann Nepomuk BOLZANO (1861) Thomas Little HEATH
	6	W	(1552) Matteo RICCI (1831) Julius Wilhelm Richard DEDEKIND (1908) Sergei Lvovich SOBOLEV
	7	T	(1885) Niels BOHR
	8	F	(1908) Hans Arnold HEILBRONN
	9	S	(1581) Claude Gaspard BACHET de Meziriac (1704) Johann Andrea von SEGNER (1873) Karl SCHWARTZSCHILD
	10	S	(1861) Heinrich Friedrich Karl Ludwig BURKHARDT
42	**11**	M	(1675) Samuel CLARKE (1777) Barnabe` BRISSON (1885) Alfred HAAR (1910) Cahit ARF
	12	T	(1860) Elmer SPERRY
	13	W	(1890) Georg FEIGL (1893) Kurt Werner Friedrich REIDEMEISTER (1932) John Griggs THOMSON
	14	T	(1687) Robert SIMSON (1801) Joseph Antoine Ferdinand PLATEAU (1868) Alessandro PADOA
	15	F	(1608) Evangelista TORRICELLI (1735) Jesse RAMSDEN (1776) Peter BARLOW
	16	S	(1879) Philip Edward Bertrand JOURDAIN
	17	S	(1759) Jacob (II) BERNOULLI (1888) Paul Isaac BERNAYS
43	**18**	M	(1741) John WILSON
	19	T	(1903) Jean Frederic Auguste DELSARTE (1910) Subrahmanyan CHANDRASEKHAR
	20	W	(1632) Sir Cristopher WREN (1863) William Henry YOUNG (1865) Aleksandr Petrovich KOTELNIKOV
	21	T	(1677) Nicolaus (I) BERNOULLI (1823) Enrico BETTI (1855) Giovan Battista GUCCIA (1893) William LEonard FERRAR
	22	F	(1587) Joachim JUNGIUS (1895) Rolf Herman NEVANLINNA (1907) Saryadaman CHOWLA
	23	S	(1865) Piers BOHL
	24	S	(1804) Wilhelm Eduard WEBER (1873) Edmund Taylor WITTAKER
44	**25**	M	(1811) Evariste GALOIS
	26	T	(1849) Ferdinand Georg FROBENIUS (1857) Charles Max MASON (1911) Shiing-Shen CHERN
	27	W	(1678) Pierre Remond de MONTMORT (1856) Ernest William HOBSON
	28	T	(1804) Pierre Francois VERHULST
	29	F	(1925) Klaus ROTH
	30	S	(1906) Andrej Nikolaevich TIKHONOV
	31	S	(1815) Karl Theodor Wilhelm WEIERSTRASS

IMO 1961 [2]

Let a, b, c the sides of a triangle and A its area. Prove that

$$a^2 + b^2 + c^2 \geq 4\sqrt{3}A$$

When do we have equality?

Why Slide Rule, Pencil and Paper are Better than a Workstation

You can hold a Slide Rule at arm's length, to hit the obnoxious person at the next seat over.

Q: What's a polar bear?

A: A rectangular bear after a coordinate transform.

Unfortunately what is little recognized is that the most worthwhile scientific books are those in which the author clearly indicates what he does not know; for an author most hurts his readers by concealing difficulties.

Evariste GALOIS

An expert is a man who has made all the mistakes, which can be made, in a very narrow field.

Niels BOHR

Newton is, of course, the greatest of all Cambridge professors; he also happens to be the greatest disaster that ever befell not merely Cambridge mathematics in particular, but British mathematical science as a whole.

Leonard ROTH

It is true that a mathematician who is not also something of a poet will never be a perfect mathematician.

Karl WEIERSTRASS

November

45	**1**	M	(1535) Giambattista DELLA PORTA
	2	T	(1815) George BOOLE
	3	W	(1867) Martin Wilhelm KUTTA (1878) Arthur Byron COBLE
	4	T	(1744) Johann (III) BERNOULLI (1865) Pierre Simon GIRARD
	5	F	(1848) James Whitbread Lee GLAISHER (1930) John Frank ADAMS
	6	S	(1781) Giovanni Antonio Amedeo PLANA
	7	S	(1660) Thomas Fantet DE LAGNY (1799) Karl Heinrich GRAFFE (1898) Raphael SALEM
46	**8**	M	(1656) Edmond HALLEY (1846) Eugenio BERTINI (1848) Fredrich Ludwig Gottlieb FREGE (1854) Johannes Robert RYDBERG (1869) Felix HAUSDORFF
	9	T	(1847) Carlo Alberto CASTIGLIANO (1885) Theodor Franz Eduard KALUZA (1885) Hermann Klaus Hugo WEYL (1906) Jaroslav Borisovich LOPATYNSKY (1922) Imre LAKATOS
	10	W	(1829) Helwin Bruno CHRISTOFFEL
	11	T	(1904) John Henry Constantine WHITEHEAD
	12	F	(1825) Michail Egorovich VASHCHENKO-ZAKHARCHENKO (1842) John William STRUTT Lord RAYLEIGH (1927) Yutaka TANIYAMA
	13	S	(1876) Ernest Julius WILKZYNSKY (1878) Max Wilhelm DEHN
	14	S	(1845) Ulisse DINI
47	**15**	M	(1688) Louis Bertrand CASTEL (1793) Michel CHASLES (1794) Franz Adolph TAURINUS
	16	T	(1835) Eugenio BELTRAMI
	17	W	(1597) Henry GELLIBRAND (1717) Jean Le Rond D'ALEMBERT (1790) August Ferdinand MOBIUS
	18	T	(1872) Giovanni Enrico Eugenio VACCA (1927) Jon Leslie BRITTON
	19	F	(1894) Heinz HOPF (1900) Michail Alekseevich LAVRENTEV (1901) Nina Karlovna BARI
	20	S	(1889) Edwin Powell HUBBLE (1924) Benoit MANDELBROT
	21	S	(1867) Dimitri SINTSOV
48	**22**	M	(1803) Giusto BELLAVITIS (1840) Emile Michel Hyacinte LEMOINE
	23	T	(1616) John WALLIS (1820) Issac TODHUNTER
	24	W	(1549) Duncan MacLaren Young SOMERVILLE (1909) Gerhard GENTZEN
	25	T	(1873) Claude Louis MATHIEU (1841) Fredrich Wilhelm Karl Ernst SCHRODER
	26	F	(1894) Norbert WIENER (1946) Enrico BOMBIERI
	27	S	(1867) Arthur Lee DIXON
	28	S	(1898) John WISHART
49	**29**	M	(1803) Christian Andreas DOPPLER (1849) Horace LAMB (1879) Nikolay Mitrofanovich KRYLOV
	30	T	(1549) Sir Henry SAVILE

IMO 1961 [4]

P is inside the triangle ***ABC***. ***PA*** intersects ***BC*** in ***D***, ***PB*** intersects ***AC*** in ***E***, and ***PC*** intersects ***AB*** in ***F***. Prove that at least one of ***AP/PD***, ***BP/PE***, ***CP/PF*** does not exceed ***2***, and at least one is not less than 2.

Why Slide Rule, Pencil and Paper are Better than a Workstation

Nobody will make you feel bad by introducing a smaller, faster, cheaper slide rule next month

In modern mathematics, algebra has become so important that numbers will soon only have symbolic meaning.

The history of astronomy is a history of receding horizons.

Edwin Powell HUBBLE

The history of mathematics, lacking the guidance of philosophy, [is] blind, while the philosophy of mathematics, turning its back on the most intriguing phenomena in the history of mathematics, is empty.

Imre LAKATOS

Being a language, mathematics may be used not only to inform but also, among other things, to seduce.

Benoit MANDELBROT

Probability is expectation founded upon partial knowledge. A perfect acquaintance with *all* the circumstances affecting the occurrence of an event would change expectation into certainty, and leave neither room nor demand for a theory of probabilities.

George BOOLE

Thus metaphysics and mathematics are, among all the sciences that belong to reason, those in which imagination has the greatest role. I beg pardon of those delicate spirits who are detractors of mathematics for saying this.... The imagination in a mathematician who creates makes no less difference than in a poet who invents.... Of all the great men of antiquity, Archimedes may be the one who most deserves to be placed beside Homer.

Jean Le Rond D'ALEMBERT

December

49	**1**	W	(1792) Nikolay Yvanovich LOBACHEVSKY
	2	T	(1831) Paul David Gustav DU BOIS-RAYMOND (1901) George Frederick James TEMPLE
	3	F	(1903) Sidney GOLDSTEIN (1924) John BACKUS
	4	S	(1795) Thomas CARLYLE
	5	S	(1868) Arnold Johannes Wilhelm SOMMERFELD (1901) Werner Karl HEISENBERG
50	**6**	M	(1682) Giulio Carlo FAGNANO dei Toschi
	7	T	(1647) Giovanni CEVA (1823) Leopold KRONECKER (1830) Antonio Luigi Gaudenzio Giuseppe CREMONA
	8	W	(1508) Regnier GEMMA FRISIUS (1865) Jaques Salomon HADAMARD (1919) Julia Bowman ROBINSON
	9	T	(1883) Nikolai Nikolaievich LUZIN (1906) Grace Brewster MURRAY HOPPER (1917) Sergei Vasilovich FOMIN
	10	F	(1804) Karl Gustav Jacob JACOBI (1815) Augusta Ada KING Countess of LOVELACE
	11	S	(1882) Max BORN
	12	S	(1832) Peter Ludwig Mejdell SYLOW
51	**13**	M	(1724) Franz Ulrich Theodosius AEPINUS (1887) George POLYA
	14	T	(1546) Tycho BRAHE
	15	W	(1802) Janos BOLYAI
	16	T	(1804) Wiktor Yakovievich BUNYAKOWSKY
	17	F	(1706) Gabrielle Emile Le Tonnelier de Breteuil du CHATELET (1835) Felice CASORATI (1842) Marius Sophus LIE (1900) Dame Mary Lucy CARTWRIGHT
	18	S	(1917) Roger LYNDON
	19	S	(1783) Charles Julien BRIANCHON (1854) Marcel Louis BRILLOUIN
52	**20**	M	(1494) Oronce FINE (1648) Tommaso CEVA (1875) Francesco Paolo CANTELLI
	21	T	(1878) Jan LUKASIEVIKZ (1932) John Robert RINGROSE
	22	W	(1824) Francesco BRIOSCHI (1859) Otto Ludwig HOLDER (1877) Tommaso BOGGIO (1887) Srinivasa Aiyangar RAMANUJAN
	23	T	(1872) Georgii Yurii PFEIFFER
	24	F	(1822) Charles HERMITE (1868) Emmanuel LASKER
	25	S	(1642) Isaac NEWTON (1900) Antoni ZYGMUND
	26	S	(1780) Mary Fairfax Greig SOMERVILLE (1791) Charles BABBAGE
53	**27**	M	(1571) Johannes KEPLER (1654) Jacob (Jacques) BERNOULLI
	28	T	(1808) Athanase Louis Victoire DUPRE` (1882) Arthur Stanley EDDINGTON (1903) John von NEUMANN
	29	W	(1856) Thomas Jan STIELTJES
	30	T	(1897) Stanislaw SAKS
	31	F	(1872) Volodymyr LEVIYTSKY (1896) Carl Ludwig SIEGEL (1952) Vaughan Frederick Randall JONES

IMO 1961 [6]

Given 3 non-collinear points A, B, C and a plane p not parallel to ABC and such that A, B, C are all on the same side of p. Take three arbitrary points A', B', C' in p. Let A'', B'', C'' be the midpoints of AA', BB', CC' respectively, and let O be the centroid of A'', B'', C''. What is the locus of O as A', B', C' vary?

Why Slide Rule, Pencil and Paper are Better than a Workstation

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Law of Selective Gravity: An object will fall so as to do the most damage

The shortest path between two truths in the real domain passes through the complex domain.

Jaques Salomon HADAMARD

Abel has left mathematicians enough to keep them busy for 500 years.

Charles HERMITE

Mathematics is the science of what is clear by itself.

Karl Gustav Jacob JACOBI

Priusquam autem ad creationem, hoc est ad finem omnis disputationis, veniamus: tentanda omnia existimo.

Johannes KEPLER

Number theorists are like lotus-eaters - having tasted this food they can never give it up.

Leopold KRONECKER

There is no branch of mathematics, however abstract, which may not some day be applied to phenomena of the real world.

Nikolay Yvanovich LOBACHEVSKY

The Analytical Engine weaves algebraic patterns, just as the Jacquard loom weaves flowers and leaves.

Augusta Ada KING Countess of LOVELACE

The Council of the Royal Society is a collection of men who elect each other to office and then dine together at the expense of this society to praise each other over wine and give each other medals.

Charles BABBAGE