

## HISTORY OF MATH TEST

FAMAT State Convention

1997

NOTA = None of the Above

1. This mathematician introduced decimal fractions as part of a project to unify the whole system of measurements on a decimal base.  
A. Dewey      B. Stevin      C. Pascal      D. Venn      E. NOTA
2. This mathematician is referred to as the "father of probability theory."  
A. Fermat      B. Boole      C. Pascal      D. Hilbert      E. NOTA
3. The formula  $f(x+h) = f(x) + hf'(x) + \frac{h^2}{2!} f''(x) + \dots$  is credited to what mathematician?  
A. Maclaurin      B. Euler      C. Taylor      D. Bernoulli      E. NOTA
4. This mathematician is known for his work in complex number theory and also introduced a new prime-number theory in which  $5 = (1 + 2i)(1 - 2i)$  is no longer a prime.  
A. Bernoulli      B. Legendre      C. Euler      D. Gauss      E. NOTA
5. The *Principia Mathematica* was written in the early 1900's by what two mathematicians?  
A. Russell and Whitehead      B. Hilbert and Russell  
C. Hilbert and Noether      D. Whitehead and Hilbert      E. NOTA
6. The *Principia Mathematica* dealt with what area of mathematics?  
A. logistics      B. geometry      C. probability      D. algebra      E. NOTA
7. M. LeBlanc was the name used by this mathematician of the early 1800's.  
A. Germain      B. Somerville      C. Hilbert      D. Venn      E. NOTA

8. Between 1730 and 1760, Leonhard Euler and Jean Le Rond d'Alembert separately published papers on dynamics, in which they introduced much of the theory of what topic?
- A. topology  
B. statistics  
C. multi-variable calculus  
D. game theory  
E. NOTA
9. He first used the modern integral sign, as a long letter S derived from the first letter of the Latin word summa to indicate the sum of Cavalieri's indivisibles.
- A. Newton  
B. Leibniz  
C. Riemann  
D. Lagrange  
E. NOTA
10. In 1900 this mathematician published 23 problems which have stimulated in-depth research up to the present time. Some of the problems have been solved or at least partially solved.
- A. Hilbert  
B. Russell  
C. Whitehead  
D. Noether  
E. NOTA
11. His *Essay on the Application of Mathematical Analysis to Theories of Electricity and Magnetism* was the first attempt at a mathematical theory of electromagnetism. Who is this mathematician of the 1800's?
- A. Gauss  
B. Stokes  
C. Green  
D. Cayley  
E. NOTA
12. In 1887, this mathematician introduced the linear type of integral equation that carries his name.
- A. Hilbert  
B. Laplace  
C. Hadamard  
D. Volterra  
E. NOTA
13. The first electronic computer was completed at the University of Pennsylvania in Philadelphia in 1946 and was called the
- A. Differential Engine  
B. Mark 1  
C. Turing Machine  
D. ENIAC  
E. NOTA
14. This 19th century mathematical physicist and scientific expositor published several works including "The Mechanism of the Heavens", "On the Connection of the Physical Sciences", and "On Molecular and Microscopic Sciences".
- A. Kepler  
B. Newton  
C. Somerville  
D. Pascal  
E. NOTA

24. The formula  $e^{ix} = \cos x + i\sin x$  is credited to what mathematician:  
A. Euler      B. d'Alembert      C. Bernoulli      D. Maclaurin      E. NOTA
25. In 1911 the first Polish school of topology was established by this mathematician.  
A. Kuratowski      B. Sierpinski  
C. Tarski      D. Barach      E. NOTA
26. The first publication of work done on calculus was made by Leibniz in what year?  
A. 1736      B. 1672      C. 1684      D. 1666      E. NOTA
27. It is known that Leibniz was not, however, the first to "discover" calculus. This other mathematician had a fear of what others would say if he published his work. Who was he?  
A. Riemann      B. Newton      C. L'Hospital      D. Cauchy      E. NOTA
28. What was the term used by the mathematician in #28 for a derivative?  
A. fluxions      B. derivatives      C. primes      D. slopes      E. NOTA
29. This mathematician gave the foundation of calculus as found in our textbooks, deriving the definition of a derivative starting with the definition of a limit.  
A. Riemann      B. Cauchy      C. Newton      D. Leibniz      E. NOTA
30. Grace Hopper developed which of the following computer programming languages?  
A. Pascal      B. Basic      C. Fortran      D. COBOL      E. NOTA