

Mu Alpha Theta State Convention 2012

The History of Math

1. The first person to suggest using i for $\sqrt{-1}$ was _____.
a) Descartes b) Euler c) Newton
d) Gauss e) NOTA
2. Which of the following bases was heavily used in Babylonian mathematics?
a) 5 b) 10 c) 7
d) 60 e) NOTA
3. Which of the following works are not credited to Euclid?
a) Elements b) Catoptrics c) Data
d) Metrica e) All of these were written by Euclid
4. The Seven Bridges of Königsberg, a mathematical problem that laid the foundations of graph theory, was posed by which notable mathematician?
a) Descartes b) Euler c) Newton
d) Gauss e) NOTA
5. The notation used for the number e was introduced by which mathematician?
a) Einstein b) Euclid c) Euler
d) Erdős e) NOTA
6. List all the odd integers from 2 to 999. Cross out all the multiples of 3 greater than 3, then those of 5 greater than 5, then those of 7, 11, 13, 17, 19, 23, 29, 31 (except for these numbers themselves). The numbers left are all the prime numbers less than 1000. This method is called the sieve of what mathematician?
a) Euclid b) Eratosthenes c) Fermat
d) Euler e) NOTA

7. Despite Newton's best efforts to deny him credit, who is the other man generally acknowledged to have fathered calculus?
- a) Leibniz b) Gauss c) Riemann
d) Descartes e) NOTA
8. Euclid's *Elements* was a thirteen book collection which contained theorems and proofs in all of these areas except:
- a) Number Theory b) Plane Geometry c) Solid Geometry
d) Probability e) NOTA
9. Which of the following mathematicians proposed a method of approximating pi which involved inscribing and circumscribing increasingly many sided polygons about a circle?
- a) Eratosthenes b) Archimedes c) Euclid
d) Apollonius e) NOTA
10. This Greek mathematician is credited with a remarkably accurate approximation of the circumference of the Earth.
- a) Archimedes b) Heron c) Eratosthenes
d) Plato e) NOTA
11. This mathematician, who was actually a lawyer by profession, helped to standardize the notations of algebra, and was also responsible for an approximation of pi accurate to nine decimal places.
- a) Fermat b) Viète c) Cardano
d) Ferrari e) NOTA
12. This mathematician laid the foundation for what is now known as Analytic Geometry in his text: *Geometry*.
- a) Newton b) Fermat c) Euler
d) Descartes e) NOTA
13. The terms coordinate, abscissa, and ordinate were coined by this mathematician.
- a) Descartes b) Fermat c) Leibniz
d) Euclid e) NOTA

14. What seventeenth-century Japanese mathematician introduced determinants and calculated pi as 3.14159265359?
- a) Yoko Tjurki b) Seki Kowa c) Tsu Chin
d) Huiyin Yokin e) NOTA
15. What ancient civilization was the first to calculate pi as 355/113?
- a) Sumerian b) Germanic c) Assyrian
d) Chinese e) NOTA
16. The constant e was formally introduced to the world of mathematics in what year?
- a) 1534 b) 1495 c) 1887
d) 1748 e) NOTA
17. Euler approximated the first _____ digits of e without giving any explanation on how he reached that calculation.
- a) 3 b) 7 c) 13
d) 18 e) NOTA
18. In which month is Pi Day celebrated?
- a) January b) March c) August
d) November e) NOTA
19. According to the *Guinness Book of World Records (2012)* Chao Lu currently holds the record for memorizing the most digits of Pi. How many digits of Pi were recited without mistake?
- a) 12,397 b) 100,000 c) 67,890
d) 2,145 e) NOTA
20. This ancient mathematician, an elder of Socrates and once a Pythagorean, is noted for four clever paradoxes. One of these involves Achilles, the fastest runner in Greece, who could seemingly never catch up to a tortoise that has been given a head start in a race.
- a) Aristotle b) Euclid c) Plato
d) Zeno e) NOTA
21. This author of *Philosophie Naturalis Principia Mathematica* said "If I have seen farther than others, it is because I have stood on the shoulders of giants."
- a) Rene Descartes b) Galileo Galilei c) Johannes Kepler
d) Isaac Newton e) NOTA

22. This French-born mathematician discovered the “bell-shaped” normal distribution curve.

- a) Bernoulli b) DeMoivre c) Fermat
d) Hardy e) NOTA

23. Who is known as the father of modern geometry.

- a) Pythagoras b) Euler c) Socrates
d) Euclid e) NOTA

24. The term trigonometry is derived from two Greek words. The first meaning triangle, the second meaning measure. Which of these words means triangle in Greek?

- a) trigonōmos b) metron c) triomino
d) trigōnon e) NOTA

25. Triskaidekaphobia, not to be confused with Paraskevidekatriaphobia, is the fear of what?

- a) Triscuits b) the number 13 c) math
d) Friday the 13th e) NOTA

26. In the 13th century, bakers who were found to have shortchanged customers could be subject to severe punishment. To guard against the punishment of losing a hand to an axe, a baker would give _____ pastries for the price of a dozen.

- a) 11 b) 12 c) 13
d) 18 e) NOTA

Answer Key

1. b) Euler
2. d) 60
3. d) Mechanics
4. b) Euler
5. c) Euler
6. b) Eratosthenes
7. a) Leibniz
8. d) Probability
9. b) Archimedes
10. c) Eratosthenes
11. b) Viète
12. d) Descartes
13. c) Leibniz
14. b) Seki Kowa
15. d) Chinese
16. d) 1748
17. c) 13
18. b) March
19. c) 67,890
20. d) Zeno
21. d) Isaac Newton
22. b) DeMoivre
23. d) Euclid
24. d) trigōnon
25. b) the number 13
26. c) 13