1. Who is credited with introducing the symbol for *infinity*?

a. Pythagoras   b. John Wallis   c. Georg Cantor   d. George Boole
e. NOTA

2. One of Einstein's famous quotes is "."If A is success in life, then A equals X plus Y plus Z. Work is X, Y is play, and Z is _____.""

a. making friends   b. not acting stupid   c. keeping your mouth shut
d. determination   e. NOTA

3. _____ created the first working mechanical calculator in 1642.

a. Fermat   b. Pascal   c. Descartes   d. Newton   e. NOTA

4. Created by W.R. Hamilton and Thomas Kirkman, the Traveling _____ Problem is popular within the field of computer science.

a. Salesman   b. Librarian   c. Pilot   d. Doctor   e. NOTA

5. Of the following twentieth century mathematicians, who passed away most recently?

a. Paul Erdos   b. Benoit Mandelbrot   c. John Nash   d. Paul Cohen
e. NOTA

6. Around 300 B.C. Hindu cultures gave the Sanskrit word _____ to denote zero.

a. shunya   b. sapta   c. kam   d. pancha   e. NOTA

7. Euclid is famous for his book *The Elements*. Book III is primarily about _____.

a. geometric algebra   b. ratios and proportions   c. number theory   d. regular solids
e. NOTA

8. In northwestern Brazil there is a small tribe of people known as the ___ Tribe. Their unique culture makes headlines due to their simplistic language. In fact, they have no exact words to represent numbers. Instead, they use words for quantities such as "a few" and "a lot."

a. Piraha   b. Miranha   c. Tapuio   d. Arara   e. NOTA

9. Because of the hosting country's strong attachment to the number, the Beijing Olympics opening ceremony was held on _____ (month/date) in 2008.

a. 8/8   b. 7/7   c. 6/6   d. 9/9   e. NOTA

10. The Infinite Monkey Theorem, developed in 1913, poses the idea that if you have an infinite number of monkeys positioned at typewriters and you keep them adequately fed and watered, one of them will eventually type out a complete text such as Hamlet just by pressing random keys. In an episode of The Simpsons, there is a spoof on this theorem where Mr. Burns has 1000 monkey typing and one of them comes close to randomly typing the first line of Dicken's *A Tale of Two Cities* as "It was the best of times it was the ___ of times.

a. jurst   b. blurst   c. thirst   d. gurst   e. NOTA

11. Named after its creator, the ____ Abacus is used by the blind. A soft cloth or rubber is used to keep the beads in place allowing the user to manipulate them in order to perform mathematical calculations.

a. Felix   b. Poncelet   c. Levio   d. Cranmer   e. NOTA

12. Until 1536 only five perfect numbers were known to exist. Who found both a sixth and seventh perfect number?

a. Pietro Cataldi   b. Hudalrichus Regius   c. Marin Mersenne
d. Hans Riesel   e. NOTA

13. Although the creator of the original protractor is unknown, _____ invented the three-arm protractor in 1801.

a. Pierre Fatou   b. Joseph Huddart   c. John Horton Conway
d. Claude Shannon   e. NOTA

14. One of the earliest occurrence of complex numbers is found in *Ars Magna* written by Girolamo Cardano which was published in 1545. In it, there exists a problem whose solution requires the square root of what number?

a. -2   b. -4   c. -10   d. -15   e. NOTA

15. The word "jiffy" has specific mathematical origins. Gilbert Newton Lewis suggested that the word be used to define the amount of time that it takes light to travel one _____inside a vacuum.

a. inch   b. centimeter   c. meter   d. foot   e. NOTA

16. Which one of the following died in his early twenties?

a. Pascal   b. Fermat   c. Gauss   d. Galois   e. NOTA

17. The word *hundred* is actually derived from the word *hundrath* which means ____.

a. 100   b. 200   c. 110   d. 10   e. NOTA

18. The word *mathematics* is found in only one of Shakespeare's plays. Which one?

a. *The Taming of the Shrew*   b. *Hamlet*   c. *Romeo and Juliet*   d. *Othello*
e. NOTA

19. Which female mathematician attended University of Erlangen but was only allowed to
     audit classes because of her sex? Later in life she moved to America and taught
     at a college in Pennsylvania.

a. Emmy Noether   b. Sophie Germain   c. Julia Robinson   d. Ada Lovelace
e. NOTA

20. Because small rocks were once used to count and represent numbers, the word
     calculus, which means ____in Greek, was chosen to denote that field of mathematics.

a. pebbles   b. gems   c. quartz   d. earth   e. NOTA

21. Inspired by Rene Descartes, ___ created a painting called The Square Root of Two.

a. Paolo Uccello   b. Christopher Alexander   c. Man Ray
d. Crockett Johnson   e. NOTA

22. Thought to be one of the oldest mathematical artifacts, the Lebombo Bone is the ___
     of a baboon.

a. femur   b. tibia   c. fibula   d. humerus   e. NOTA

23. The smallest non-trivial mathematical group has how many elements?

a. 1   b. 2   c. 3   d. 4   e. NOTA

24. The Pythagorean Theorem goes by several different names in the world of
     mathematical folklore. Which of the following is *not* one of those names?

a. The Peacock' Tail   b. The Bride's Chair   c. The Windmill   d. The Dresser's Drawer
e. NOTA

25. Which of the following fractions has a strong association to the Fibonacci Sequence?

a. 1/11   b. 1/89   c. 3/17   d. 1/99   e. NOTA

26. Which of the following movies is about Srinivasa Ramanujan?

a. *A Beautiful Mind*   b. *N is a Number*   c. *Breaking the Code*
d. *The Man Who Knew Infinity*   e. NOTA

27. At the second meeting of the International Congress of Mathematicians in 1900, this
    man posed his collection of 23 math problems that he believed should be studied in
    the upcoming century.

a. David Hilbert   b. G.H. Hardy   c. Georg Cantor   d. Arthur Cayley
e. NOTA

28. Many are aware that Lewis Carroll was not only a writer, but a mathematician as well.
    This book, written by Alan Garner, concludes with a message written from Tom to Jan,
    written in code inspired by Lewis Carroll's Alphabet Cipher.

a. *The Owl Service*   b. *Red Shift*   c. *The Golden Brothers*   d. *Lad of the Gad*
e. NOTA

29. Which of the following is *not* an award in the field of mathematics?

a. Chern Medal   b. Abel Prize   c. Booker Prize   d. Fields Medal
e. NOTA

30. Many mathematicians have given their thoughts over the value of a number divided
    by zero. Who declared that a number divided by zero is equal to infinity?

a. Brahmagupta   b. Mahavira   c. Bhaskara   d. Diophantus
e. NOTA