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THE MAGICAL NUMBER PI

The mathematical constant π is called the number which has its secrets and hidden meanings by many members of the scientific community. If you look at a number of historical studies, it can be said, that scientists of all time, paid a lot of attention to this number.

It is a well-known fact, that pi is the ratio of the circumference of a circle to its diameter. It should be mentioned, that a number of interesting and amazing facts about pi exists.

1. Pi (π) is the most recognized mathematical constant in the world, that has been known for almost 4000 years. Its value is the ratio of any circle's circumference to its diameter in Euclidean space or the ratio of a circle's area to the square of its radius. The value of pi is approximately equal to 3.14159265, but it is an irrational number and its decimal representation never ends or repeats.
2. The symbol for pi (π) has been used regularly in its mathematical sense only for the past 250 years.
3. Both π and the letter p are the sixteenth letter in the Greek and English alphabets, respectively [3].
4. Egyptologists and the followers of mysticism have been fascinated for centuries by the fact that the Great Pyramid at Giza seems to approximate pi. The vertical height of the pyramid has the same relationship to the perimeter of its base as the radius of a circle has to its circumference.
5. If the circumference of the earth were calculated using π rounded to only the ninth decimal place, an error of no more than one quarter of an inch in 25,000 miles would result.
6. A mysterious 2008 crop circle in Britain shows a coded image representing the first 10 digits of pi [5].
7. For the first time, the scientists have discovered a classic formula for pi in the world of quantum physics. Now the scientists have also found it "lurking" in the world of physics, when using quantum mechanics to compare the energy levels of a hydrogen atom.
8. The father of calculus Isaac Newton calculated pi to at least 16 decimal places.
9. In 1995, Hiroyuki Gotu memorized 42,195 places of pi.

10. In 2002, a Japanese scientist found 1.24 trillion digits of pi using a powerful computer called the Hitachi SR 8000, breaking all previous records.
11. The world record the value of pi was set by Chao Lu from China in 2005. He correctly recited from memory its first 67,890 digits. It took him 24 hours and four seconds at a rate of 47 digits a minute without food or toilet breaks. He had planned to recite 93,000 digits but made a mistake at the 67,891st [7].
12. The first million decimal places of pi consist of 99,959 zeros, 99,758 1s, 100,026 2s, 100,229 3s, 100,230 4s, 100,359 5s, 99,548 6s, 99,800 7s, 99,985 8s, and 100,106 9s.
13. The first 144 digits of pi add up to 666 (which many scholars call it “the mark of the Beast”). And $144 = (6+6) \times (6+6)$ [1].
14. The Feynman Point is the first place where 6 9s occur in π . This happens at digit 762, which is much sooner than expected.
15. If you were to print 1 billion decimal values of pi in ordinary font it would stretch from New York City to Kansas.
16. Leonardo da Vinci (1452-1519) and Albrecht Durer (1471-1528) both briefly worked on “squaring the circle,” or approximating pi [6].
17. A Givenchy men’s cologne named Pi is marketed as highlighting the appeal of intelligent and visionary men.
18. «Pi Day» is celebrated on March 14 (which was chosen because it resembles 3.14). The official celebration begins at 1:59 p.m., to make an appropriate 3.14159 combined with the date [2].
19. Albert Einstein was born on Pi Day (3/14/1879) in Ulm Wurttemberg, Germany.
20. If you write 3.14 on a piece of paper and hold it in front of the mirror, it will say PIE [4].

It can be said, that interesting facts about pi don’t stop there and it is thought, that pi is the most recognized mathematical constant in the world.

So, the scientists believe, that pi is the most important and intriguing number in all of mathematics.

LITERATURE

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