

March 14: Pi Day

Have you ever wanted an “everlasting gob stopper” from Willie Wonka? Or been curious about a lake that people claim is bottomless? Do you wonder what is beyond the universe and does it ever end?

The question and curiosity about something that is endless has intrigued humans since...well, probably since the first human looked at the night sky or across a vast ocean.

So, it's no wonder that pi has been a mathematical puzzle.

As you probably already know, pi (π) is the ratio of a circle's circumference to its diameter. It is noted as 3.14 or $\frac{22}{7}$. But if you want to be really accurate, it is 3.14159265359 -- and the number continues -- without a repeating pattern.

Computers have been able to calculate pi to over three *trillion* digits (that is 3 followed by 12 zeros). But your teacher may not require you to use it with that much precision!

The History of Pi

People have long recognized that circles are special. One reason is that regardless of their size, the circumference of a circle is always a bit more than three times the diameter. Always. That's interesting, right?

Mathematicians who lived over 4,000 years ago thought so too. The first record of people trying to figure out the exact ratio for this puzzle came from the ancient Babylonians. They used the number 3.125. The ancient Egyptians calculation came to 3.1605.

Fast forward a thousand years or so to the time of the Greeks. Archimedes, who was an amazing mathematician, engineer, and inventor, used a series of polygons to determine pi. His calculation was incredibly accurate – and he didn't even have a calculator!

Like so many ancient scientists, Archimedes laid the ground for future mathematicians who used Archimedes' methods to try to determine pi.

In 1706, William Jones suggested that the Greek letter pi π is used to show the ratio of the circumference of a circle to its diameter. Using this symbol provides a shortcut and consistent way to communicate the number. The symbol was widely adopted and used still used today.

Can you define these math terms?

Circumference
Diameter
Circle
Rational numbers
Irrational numbers
Ratio
Transcendental

According to the *Guinness World Records*, Rajveer Meena holds the record for memorizing the longest number of decimal places for pi – 70,000.

It took Rajveer ten hours to recite the numbers, and he wore a blindfold through the entire process.

Pi Day!

March 14 (3.14) is not only π but is also Albert Einstein's birthday. In 1988, Larry Shaw was working as a physicist at San Francisco's Exploratorium museum when he organized the first Pi Day. Since then, it has been an annual event – and from there spread around the globe.

In 2009, the United States House of Representatives recognized it as National Pi Day. In 2015, Pi Day was celebrated on 3.14.15!

I'll have a slice of Pi? Pie!

Just in case you want to have a snack after you celebrate studying never ending numbers and circles on March 14, you might consider a slice of pie (also a circle shape, so that is good news!).

There is history for pie?

Like π , pie has been around for thousands of years. Ancient people discovered if they made a dough by mixing grains with water and fat, they could use the dough to wrap meats and fruits during cooking. The dough kept in juices that might otherwise be cooked away.

The Romans adopted the idea of pie from the Greeks. The Romans elevated pie cooking to a culinary art by making a true pie crust and filling it with sweet or savory foods – including mussels and other seafood.

During the medieval times in England, pies (spelled pyes) had very thick crusts and were primarily filled with meat. The thick crusts ensured the filling stayed juicy during long cooking times. The crust was called a "coffyn," which at the time meant "basket." The crust was more of a filling holder or baking vessel than something you would eat.

In the 1500s, bakers began to make fruit pies (also called tarts). They were probably made for Queen Elizabeth I.

When English settlers sailed to the New World, they brought pie-making skills along with them. Colonists baked pie in a long baking pan called a "coffin." Eventually, the pan evolved into a round, shallow dish, and the pastry was called "crust" rather than "coffin" (that's a relief!).

Pies around the globe

Many cultures have dishes that are similar to pie.

- If you visit Trinidad and Tobago, you can have a savory fried pie called *aloo* that is filled with peas and potatoes.
- Go to Bedfordshire, England for a meat or fruit-filled *Bedfordshire clanger*.
- In Greece, you can sample a *bougatsa*.
- Take a trip to Thailand to taste a *curry puff*.
- An *empanada* is a sweet or savory pie you might find in Spain or Latin America.
- A *echpochmak* is served in Russia.
- You could be served *sambusac* if you asked for pie in India or parts of Africa.