

§calcwars

<http://twitter.com/busynessgirl/calcwars>

The script for §calcwars was written and tweeted by students at Muskegon Community College.

Credits

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1661

Newton¹ and Leibniz² are both students.

Newt. Wow, I'm attending Cambridge University... I'm pretty excited to study maths! :)

I wish I didn't have to do all this tutoring to pay for my education.

Leib. Just made a Twitter account... I wonder what this whole thing is about.

Newt. Being a loan shark is a much better way to make ends meet than being a sizar...

Leib. First day of College.... Oh Boy!

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- 1 Sir Isaac Newton FRS (4 January 1643 – 31 March 1727) was an English physicist, mathematician, astronomer, natural philosopher, alchemist, and theologian who is considered by many scholars and members of the general public to be one of the most influential people in human history.
 - 2 Gottfried Wilhelm Leibniz (sometimes von Leibniz) (1 July 1646 – 14 November 1716) was a German mathematician and philosopher who wrote primarily in Latin and French. He occupies a grand place in both the history of philosophy and the history of mathematics.

1662

The Royal Society³ is established in England.

Newt. All hail king Charles III⁴ New Amsterdam⁵ is a great addition to our country.

Leib. Meet Antoine Arnauld⁶ today, he is such a wonderful philosopher, plus I love philosophy.

Newt. I feel compelled to atone for my sins... I have to change my ways.

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- 3 The Royal Society of London for the Improvement of Natural Knowledge, known simply as the Royal Society, is a learned society for science, and is arguably the oldest such society in existence.
- 4 Charles II (29 May 1630 OS – 6 February 1685) was monarch of the three kingdoms of England, Scotland, and Ireland. Charles was popularly known as the Merrie Monarch, in reference to both the liveliness and hedonism of his court and the general relief at the return to normality after over a decade of rule by Oliver Cromwell and the Puritans.
- 5 New Amsterdam (Dutch: Nieuw-Amsterdam) was a 17th-century Dutch colonial settlement that served as the capital of New Netherland. It later became the city now known as New York City.
- 6 Antoine Arnauld (February 6, 1612 – August 6, 1694) — le Grand as contemporaries called him, to distinguish him from his father — was a French Roman Catholic theologian, philosopher, and mathematician.

1663

Robert Hooke⁷ discovers that cork is made of “tiny little rooms” which he first called “Cells.”

Newt. Met my new roommate, John Wickens. He seems pretty cool, I think we'll get along.

Leib. Got my bachelor's degree for the University of Leipzig. On to the doctorate.

I got to see a unicorn skeleton⁸ today, I can't believe I doubted that they existed.

1664

Kronenbourg, a popular lager, is first produced.

Newt. Can't go outside: the “bodkin–eyeball” experiment has really done a number on my light sensitivity...

7 Robert Hooke FRS (18 July 1635 – 3 March 1703) was an English natural philosopher, architect and polymath who played an important role in the scientific revolution, through both experimental and theoretical work.

8 This so-called unicorn had only two legs, and was constructed from fossil bones of a Woolly rhinoceros and a mammoth, with the horn of a narwhal. The skeleton was examined by Leibniz, who was convinced by it.

Leib. Have to defend my Master's thesis, "De Principo Individui" today... wish me luck. <http://bit.ly/cG5Bwr>

Newt. I don't want to do anything but my maths... why bother going to lectures?

Leib. All went well, that's a big weight off my shoulders. =]

Newt. looked at the sun for too long... been inside for days, hopefully it returns to normal soon...

I have begun recording my maths in my "Waste Book." I am pretty excited about being elected scholar!

1665

The Great Plague⁹ sweeps through England, killing approximately 100,000.

Newt. Just recieved a bachelor's degree. My long hours of study are paying off.

9 The disease is identified as bubonic plague, an infection by the bacterium *Yersinia pestis*, transmitted through a flea vector. The 1665–1666 epidemic was on a far smaller scale than the earlier "Black Death" pandemic, a virulent outbreak of disease in Europe between 1347 and 1353.

- Leib.* School, school, school. Getting your doctorate takes forever.
- Newt.* There are some beautiful comets in the sky... writing some new techniques for drawing tangents to mechanical lines.
- Leib.* I love to learn, but sometimes school is a pain in the butt.
- Newt.* Apparently I am staying inside of my house for the duration of this plague. More time to study, I suppose. Off to Woolsthorpe!
Seclusion isn't half bad... and of course, I have John to keep me company. I am much more efficient when left in peace!

1666

*The Great Fire of London*¹⁰ destroys about 80% of the city, including almost all the printing presses.

Newt. And yet another amazing discovery... curious? Hah! Keep guessing. ;)

The scent of the apple orchards is distracting me from my studies... I love apples.

Leib. Finished my dissertation today, I call it “Dissertatio de Arte Combinatori”¹¹

WTF!!!!!! The University of Leipzig denied me my doctorate today, I do not understand why. My dissertation was perfect

Newt. ANOTHER GREAT DISCOVERY!... no time to tweet about it...

10 The Great Fire of London was a major conflagration that swept through the central parts of the English city of London, from Sunday, 2 September to Wednesday, 5 September 1666. The fire gutted the medieval City of London inside the old Roman City Wall. It consumed 13,200 houses, 87 parish churches, St. Paul's Cathedral, and most of the buildings of the City authorities.

11 The *Dissertatio de arte combinatoria* was published by Gottfried Leibniz in 1666. It is a youthful work, written before the author had seriously undertaken the study of mathematics. Although it is a very original work and it provided the author the first glimpse of fame among the scholars of his time he often regretted its publication because he considered it premature.

John and I are going back to
Cambridge! School is back in
session. :D

Leib. Changed schools, hopefully they
won't hold me back at this one.

1667

The first human blood transfusion is administered by Dr. Jean-Baptiste Denys. He transfuses the blood of a sheep to a 15-year old boy.

Newt. Making another trip to Woolsthorpe.

Leib. It's about time! Earned Doctorate
from University of Altdorf today,
not that I didn't deserve it a year ago.

Newt. And back to Cambridge I go!

Leib. Moving to Nuremberg, I'm so happy
to go somewhere new. =)

I got into the Alchemist Society in
Nuremberg using a paper that I
didn't even comprehend. What does
that say about the Alchemist Society?

Thanks Johann von Boineburg,¹² for
helping me land a job in the High
court of Appeals.

¹² Johann Christian von Boineburg (1622–1672), the dismissed chief minister of the Elector of Mainz, Johann Philipp von Schönborn.

Newt. I was just elected minor fellow of Trinity College... writing enumeratio curvarum.

Not sure about that fine print of "celibacy" in the Fellows paperwork.

Well, that was a short trip. Time to go back home to Woolsthorpe.

Leib. Met Herman Andrew today. He is pretty cool, which is good considering I have to work with him for two years.

1668

Francesco Redi disproves theories of the spontaneous generation of maggots in putrefying matter.

Newt. Okay... going back to Cambridge again. I'm excited.

Leib. I have to rewrite the legal code for Nuremburg, anyone got any laws they want passed?

Newt. These final exams are a joke! :P
Graduation day! I have a master's degree! :D
OMG, I'm going to London! So excited!

London was great! Going to stop in Woolsthorpe before heading back to Cambridge.

1669

Nicolas Steno puts forward his theory that sedimentary strata had been deposited in former seas, and that fossils were organic in origin.

Newt. Oldenburg,¹³ I have an interesting new telescope design¹⁴ to discuss with you... did you get my email from Feb 23?

Olde. Yes, I have received it... Quite a nice concept!

13 Henry Oldenburg (Heinrich) (c. 1619 – 5 September 1677) was a German theologian known as a diplomat and a natural philosopher. He was one of the foremost intelligencers of Europe of the seventeenth century, with a network of correspondents to rival those of Fabri de Peiresc, Marin Mersenne and Ismaël Boulliau.

14 Newton's first reflecting telescope was completed in 1668 and is the earliest known functional reflecting telescope. The Newtonian telescope's simple design makes them very popular with amateur telescope makers.

Newt. Collins,¹⁵ I have just sent you De
analisi.¹⁶ Hope you enjoy it. :)

Woot! I am now the Lucasian
Professor of Mathematics!¹⁷

Visiting London again. What a
wonderful city... especially in the fall!

Collins, hello there! =) I thoroughly
enjoyed meeting you while in
London.

Coll. Newton, I enjoyed meeting you as
well. It was a great pleasure. I know
you'll do great things for the world
of maths. :)

Leib. I'm working on something big, it's
going to be revolutionary!

15 John Collins (25 March 1625 – 10 November 1683) was an English mathematician. He is most known for his extensive correspondence with leading scientists and mathematicians such as Giovanni Alfonso Borelli, Gottfried Leibniz, Isaac Newton, and John Wallis.

16 Newton's manuscript "De analysi per aequationes numero terminorum infinitas" ("On analysis by equations infinite in number of terms") was sent by Isaac Barrow to John Collins in June 1669: in August 1669 Barrow identified its author to Collins as "Mr Newton, a fellow of our College, and very young ... but of an extraordinary genius and proficiency in these things".

17 It is widely regarded as one of the world's most prestigious academic posts. The post was founded in 1663 by Henry Lucas, who was Cambridge University's Member of Parliament from 1639–1640, and was officially established by King Charles II on January 18, 1664.

1670

The first longcase clock is built in England by William Clement.

Newt. My optical lecture went well today. I love when others benefit from my discoveries. Nice way to start the year!

Collins, I just sent you an email on the summation of the harmonic series... ;)

Leib. Finally done! Everyone should read a copy of “A New Physical Hypothesis.” It will blow your mind.

That is of course if you are interested in ideas about concrete and abstract motion.

Coll. Newton, why, thank you! Do you have the solution of the annuity problem?

Newt. Collins, yes... it is in your inbox. I could give you more exact answers, but unfortunately I don't have time for such computations.

1671

Thomas Blood, disguised as a clergyman, attempts to steal the Crown Jewels from the Tower of London.

Newt. I just keep writing more and more... :)

Leib. I just read Geometria, and I think there is more to this mathematics thing.

So I have decided to focus my attention on a new field. Anyone have advice for a budding mathematician?

Newt. The snow is falling... it made my fingers numb as I sent my reflecting telescope to the Royal Society.

1672

John Flamsteed¹⁸ determines the solar parallax from observations of Mars.

Newt. It is a great honor to be elected Fellow of the Royal Society!

¹⁸ John Flamsteed FRS (19 August 1646 – 31 December 1719) was an English astronomer and the first Astronomer Royal.

Oldenburg, I am sending you my new theory to be published. Hope you enjoy!

Olde. Newton, splendid. I look forward to receiving it.

Newt. Just published “A New Theory About Light and Colours”¹⁹ in Philosophical Transactions. Read it, it's good!

Olde. Newton, your theory was read in front of the society and, well... Hooke was... not impressed, to say the least.

Hook. Newton, your theory on light and colours is simply ridiculous. Such outlandish ideas have no place in science.

Hah! How could anyone think that white light is a combination of all of the colours? Obviously it is the absence of light...

Newton, I have performed your experiments many times in the past. I know what I am talking about.

¹⁹ In 1672, the journal published Newton's first paper New Theory about Light and Colours, which can be seen as the beginning of his public scientific career.

Newton, IN FACT, they have shown that color is a refraction of light; light a propagating pulse through transparent medium.

Newt. It would be splendid if some of my colleagues would be more open to new ideas.

Hooke, I have received your response to my theory via email. I am amused. It is quite insufficient and unintelligible at best.

Hook. Newton, is that so? The only unintelligible thing I can find is your thought process!

Today has been quite a busy day! It's not easy to always be right...

Newt. Hooke, I am sure it is difficult always being right... but you seem to be busier with invalid perceptions.

All of this drama makes me never want to publish again... :(

Leib. I must go to Paris to convince King Louis not to attack the Dutch, sorry Egypt.

Well I didn't make it to Paris in time, but at least I didn't say something that made King Louis start a war.

This place is amazing. It such a beautiful city, and there are so many scholars here. My PLN will be awesome here!

Newt. Collins, hello again. I just sent you an email on the method of tangents. :)

1673

The Test Act: Those who refuse to receive the sacrament of the Church of England cannot vote, hold public office, preach, teach, attend the universities and assemble for meetings.

Newt. Apparently a break from publishing is in order. I need time to bring clarity to my mind.

Leib. w00t! I got elected into the Royal Society. On top of that I finished my counting machine.

Helped the Archduke of Mecklenberg —that's a mouthful — get divorced. He rewarded me handsomely. =]

I hate doing legal work, I wish I could just stay in Paris for free.

What am I supposed to do? How could you be gone Boineburg...

They said I could only stay in Paris for “awhile”. =]

I have to tutor Boineberg's son, it is the least I could do for an old friend.

Philip is such a punk, he is not even interested in learning. All he wants to do is party. I am worried about today's youth.

So I sent a letter to the Boineberg family asking for more provisions because Philip was too hard to handle and they fired me. Really?

Did anyone ever realize how far the British have developed in mathematics? I'm always the last to know everything...

Both Issac Newton and Scot Gregory seem to have a comprehension greater than my own... =/

1674

Antonie van Leeuwenhoek develops the prototype of the modern microscope.

Newt. Going to London again. :)

Leib. Oh my gosh, I cannot believe that I am embarrassed myself so thoroughly.

In my defense, I actually thought that I was the first to discover that.

Why do all the jobs here require you to be of noble birth? This is unbelievable.

Was offered a job as Secretary to the Chief Minister to the King of Denmark —also a mouthful— but I still have much to do in Paris

It wasn't enough that I'm not of noble birth, now I am being discriminated for not being French as well.

Maybe I should have just took the job in Denmark. :P

BN/GN I have been forced to work for Duke Johann Friedrich in Hanover. Good news is that they said I could stay in Paris for now.

Friedrich, my counting machine cannot be rivaled by any other, and is one of the most innovative technologies to date.

Making my counting machine all the better.

Oldenburg, done!

Anyone want to checkout my counting machine, stop by my place on Friday night.

Everyone was so impressed, the French finance minister, Colbert, wants three of them at his disposal.

Oldenburg, I sent you an email with all of my work on geometry so far, including some ground breaking stuff.

1675

Giovanni Cassini discovers Saturn's Cassini Division.

Newt. My first trip to the Royal Society went amazingly well. I simply love being around those who understand me.

Leib. Well... what I thought was original, turned out to be a reproduction. Not a good day to be me.

Oldenburg, well that's cool, but I wonder if they have advanced as far as I have. See if they want to brainstorm some ideas.

Olde. Leibniz, I have emailed you some of the works of British mathematicians. Pay particular attention to Newton's work.

Leib. Ha, I know Newton is pretty smart,
but I got some tricks up my sleeve.
Just finished my invention prepare
for written work.
If Newton really understands the
quadrature of curves, he better speak
now.
That's what I thought.
S —it's not just an “s” anymore.
Claude, the answer is.... well your
gonna have to come get it.
Oldenburg, hey, I've got some great
new methods that I need to show
you, especially on that one problem.

1676

Foundation of the Royal Greenwich Observatory.

Newt. Oldenburg, have you received my
epistola prior for the Royal Society
meeting?

Leib. Shucks, the Duke wants me in
Hanover. I'm gonna stall.

Tschirnhaus²⁰ came to visit me today,
I think we have a lot to teach each
other.

Olde. Newton, why, yes... I just got it
today. Thank you.

Newt. Oldenburg, I have just sent you
my epistola posterior via email.
Hopefully the next reply is more
prompt.

Olde. Newton, I believe sir Leibniz
has been preoccupied with other
matters... I am sure the late reply is
not meant to offend.

Newton, I just sent you a new
email... Lucas seems to have some
objections to your theory of light and
colours.

Newt. Oldenburg, just replied! Oh, and
I have included the “algebraic
communications” Mr. Leibniz had
asked for. :)

Olde. Leibniz, I sent an email to Mr. Konig
and told him to forward it to you, did
you receive it yet?

Leib. Oldenburg, not that I am aware of.

20 Ehrenfried Walther von Tschirnhaus (or Tschirnhausen) (April 10, 1651 – October 11, 1708) was a German mathematician, physicist, physician and philosopher. He is the inventor of the European porcelain.

Olde. Leibniz, well I'm still waiting on that counting machine.

Leib. Crap, the duke is asking for me again, I think I really might have to go this time.

Hey, they offered to give me charge of the library as well, maybe I should wait a little longer.

Newton, check your inbox.

Oh crap last chance... off to Hannover.

In Calais for a bit. Got a little side tracked on my way back.

Oldenburg, told you it was done.

In London for a day or two.

Got a look at De Analysi and Historiola. That's going to be a good book.

Scouring the English Channel with Prince Ruprecht von der Pfalz.

In Hangover, I mean Hannover.

1677

Antoni van Leeuwenhoek observes spermatozoa under the microscope.

Leib. Got a letter from Issac Newton, half of it is in a code I cannot decipher.

Newton, check your inbox.

Newt. Goodbye, Henry Oldenburg. I'm going to miss him. :(

Leib. Oldenburg, RIP Friend.

1678

Isaac Newton suffers an emotional breakdown.

Leib. My new “Proof of a Necessary Being” is awesome, don't you think?
<http://www.leibniz-translations.com/proof.htm>

Newt. The world is a cruel place, I no longer want to play.

Leib. More proofs! How the Soul Acts on the Body <http://www.leibniz-translations.com/howthesoul.htm>

Got to take over the library of Martin Fogel, wait a minute, why am I in Hamburg?

1679

European explorers discover Niagara Falls.

- Newt.* I'll miss you, mother. :(R.I.P.
Hannah Newton.²¹
- Leib.* Yes, Johann finally agreed to my
project, can't wait to get started.
- ...
- RIP Friedrich
Life is so weird without him.
- Hook.* Newton, I would like to discuss a
problem of planetary motion with
you... Check your inbox.
- Newt.* Hooke, your ideas are interesting. I
sent you a reply regarding the curve
that is formed by a body with such a
central force...
- Hooke, actually, I have a theorem I
can apply to that...
- Hook.* Newton, as long as you know who
deserves credit for everything... :)

²¹ Hannah died in 1679 in Stamford, Lincolnshire, when Isaac was 36. She was buried at Colsterworth on June 4, 1679 by her son, who buried her next to his father in the church. Isaac spent much of the remainder of this year in Woolsthorpe.

1680

The Great Comet of 1680 is first sighted.

- Newt.* Hooke... that man stresses me out!
- Leib.* The Harz project is so frustrating. I can make it work, it is just not cost effective.
- Newt.* Just wrote Geometria Curvilinearis. :)
- Leib.* Someone give me some more funding!!!
- Newt.* There's an amazing comet in the sky...

1681

The last dodo bird is killed.

- Newt.* Still watching that comet... I don't know why, but I find it very interesting to study.
- Leib.* Listen up, if you are in the military, then you should practice sports in your off time. Keeps you healthy.

1682

Antony Van Leeuwenhoek discovered the banded pattern of muscle fibers.

Leib. is creating a journal, Acta Eruditorum²² with my good friend @OttoMencke!

Just had "A Unitary Principle of Optics, Catoptrics, and Dioptrics" published in Acta Eruditorum

Newt. There's another comet in the sky! Wow, this is odd... but interesting nonetheless!

1683

Newt. Collins, R.I.P... You were an amazing friend and will be missed :(

Leib. I'm going to try and unify the Christians.

If I can't do it no one can.

²² Acta Eruditorum (Latin for "reports/acts of the scholars") was the first scientific journal of the German lands, published from 1682 to 1782.

1684

Newt. I was just visited by Edmond Halley²³ at Cambridge... what an intriguing man.

Leib. Anyone get my papers on calculus?

1685

Newt. My moon-test computation is complete!

Leib. So much for my Harz project...

²³ Edmond Halley FRS (8 November 1656 – 14 January 1742) was an English astronomer, geophysicist, mathematician, meteorologist, and physicist who is best known for computing the orbit of the eponymous Halley's comet.

1686

*Edmund Halley establishes the relationship between
barometric pressure and height above sea level.*

- Newt.* Presented Principia,²⁴ Book I to the Royal Society today.
- Leib.* Did everyone pick up my second paper on Calculus? It's revolutionary.
- Newt.* w00t! The Royal Society is going to publish Principia! :D

1687

- Newt.* Just published Principia Mathematica: <http://bit.ly/9Q6MaV> Buy a copy. :)
- Fati.* I am finally part of the Royal Society! :D
- Newt.* Fatio,²⁵ welcome the the Royal Society!

24 Philosophiæ Naturalis Principia Mathematica, Latin for "Mathematical Principles of Natural Philosophy", often called the Principia (sometimes Principia Mathematica), is a work in three books by Isaac Newton, first published 5 July 1687.

25 Nicolas Fatio de Duillier (alternative names are Facio or Faccio) (26 February 1664 – 12 May 1753) was a Swiss mathematician known for his work on the zodiacal light problem, for his very close relationship with Isaac Newton

Fati. Newton, it is amazing to be in a community of scientists and scholars... with someone as esteemed in rank as yourself too! ;)

Newt. Fatio, oh, you do me too much honor... But yes, I think you'll find our organization to be very intellectually enriching.

Leib. Researching Ernst Augusts' family ties. More importantly, I get to go wherever I want.

1688

Newt. This anonymous critic of my Principia needs to open thier eyes... My writings are much more than assumptions.

I thought it was obvious!

Still traveling. Trying to find more royal family history, and meeting a lot of new people.=)

1689

*Physician and collector Hans Sloane
develops a milk chocolate drink in Jamaica.*

Newt. Time to sit for a portrait! This should be fun ;)

Leib. has been contemplating symbols, characteristic arts, and expressions.
<http://www.leibniz-translations.com/symbol.htm>

Newt. It was a great honor to meet John Locke today.

Fatio, it was nice meeting you today. :D

1690

The first paper money is printed in America.

Newt. Fatio, I am looking forward to seeing you in London shortly! :)

Leib. Today I proved that Ernst is connected to the House of Este.
What do you think of Newton's version of MY calculus? IMHO, pretty much the same except mine came first.

Newt. I just don't think the Trinity exists,
and I think I can prove it, Locke.

Leib. That problem wasn't so hard. ;)

1691

Newt. Trying to get a job at the Mint.
What I wouldn't give for a nice
steady paycheck.

I suspect that they think I can turn
lead into gold, but maybe they'll hire
me even without this skill.

Leib. Boy, I'm glad communication can
happen so quickly, it would suck to be
waiting for a bunch of letters.

Newt. So happy that I am going to visit
Fatio in London again!

1692

In the American colonies, the Salem Witch trials of 1692 develop.

- Newt.* What a sad day... I attended the funeral of Robert Boyle²⁶ while in London.
- Leib.* Guess who got named to the English throne thanks to me?
- Fati.* Newton, you've visited me already... so I guess it's my turn to visit you! :)
- Newt.* I have been very productive as of late. Finished writing the appendix for my upcoming book, labeled "On the Quadrature of Curves."
Fatio, of course. How does January sound?
- Fati.* Newton, perfect. See you then!
Packing for Cambridge. Going to visit Newton!

²⁶ Robert Boyle (25 January 1627 – 31 December 1691) was an Anglo-Irish natural philosopher, chemist, physicist, and inventor, also noted for his writings in theology. He is best known for Boyle's law.

1693

- Newt.* Making some preparations for Fatio.
What a busy day!
Fatio, looks like I'm going to be in
London again... Want me to visit
you?
- Fati.* Newton, sure! It's been a few
months... :)
- Leib.* Everyone pick up "Protogaea",²⁷ its
all theoretical, but it really is quite a
good book.

1694

- Newt.* Thanks to John Flamsteed's
observations, I can now study the
orbit of the moon. This is amazing.
- Leib.* I was just accused of plagiarism, and
let me tell you it is not a good feeling.

²⁷ In the life sciences and paleontology, Leibniz revealed an amazing transformist intuition, fueled by his study of comparative anatomy and fossils. One of his principal works on this subject, *Protogaea* was unpublished in his lifetime.

Newton, hey man, we are both know the truth, and I have a tremendous amount of respect for you.

Newton, you need to set the record straight.

The counting machine phase II is finally done.

1695

Newt. Rewriting “enumeratio curvarum.”
It needs some tweaking...

Leib. Finally the rest of the world will
experience my philosophy.
Remember Britian, I'm watching.

Newt. Just finished writing Tabula
refractionum.

Leib. Gosh, this family history is going to
take forever.

1696

Newt. I am starting my new job as warden of the mint today. I am very excited :)

Leib. Don't listen to the rumors guys, I'm still alive.
Alright brachistochrone problem, do your worst.

1697

Newt. Haha! This “Lion's Paw” problem that Bernoulli²⁸ sent me will be a no brainer for me.

I knew it. Problem solved!

Leib. Just sent Bouvet a letter. Check your email...

Newt. Bernoulli, the solution to your problem is sent. :)

Bern. Newton, good job!

28 Johann Bernoulli (27 July 1667 – 1 January 1748; also known as Jean or John) was a Swiss mathematician and was one of the many prominent mathematicians in the Bernoulli family.

1698

A steam engine is developed by Thomas Savery. The piano is invented by Italian Bartolomeo Cristofori.

- Leib.* Just finished “On the Time of Purification” check it out <http://www.leibniz-translations.com/purification.htm>
- Newt.* Time to visit John Flamsteed. I love being able to travel.
suspects that 20% of the coins being taken in now are counterfeit! I must start an investigation...

1699

- Leib.* Again with the plagiarism, I mean really.
- Newt.* I knew people have been counterfeiting coins throughout the Great Recoinage! Just persecuted 28 counterfeiters!

1700

- Leib.* Alright Fatio, that is enough. I have proved you wrong. just drop it.
- Newt.* Another new century... uncorking the fluxions! ;)

1701

The seed drill, invented by Jethro Tull, allows farmers to sow seeds in well-spaced rows at specific depths.

- Newt.* New mint report <http://www.pierre-marteau.com/editions/1701-25-mint-reports/report-1701-09-28.html>

1702

A fountain pen was developed by Frenchman M. Bion.

- Newt.* Today's agenda: Visit Locke and sit for a portrait! Sounds like a plan. :)
- Leib.* Things that are constant, go unnoticed.

1703

- Newt.* Haha... One nemesis gone! Time to uncork the wine.
- Leib.* Anyone curious as to how the the binary works, I just published some papers on it.
- Newt.* Our former Royal Society president, Robert Hooke, will be dearly missed. I am honored to take his place.

1704

In oil painting, colormaker Diesbach of Berlin accidentally invents the pigment Prussian Blue.

- Newt.* Opticks²⁹ is finally finished. <http://bit.ly/cxWKeJ> IMHO It is much better than anything Leibniz has written. ;)
- Leib.* Meh! Newton well it's about time you published something new!

²⁹ Opticks is a book written by English physicist Isaac Newton that was released to the public in 1704. It is about optics and the refraction of light, and is considered one of the great works of science in history.

1705

Newt. Today I became a knight, by the graciousness of Queen Anne.³⁰ This is a great honor!

Anyone who thinks I borrowed my original ideas from Leibniz is obviously quite deluded and oblivious to the world of mathematics.

Leib. Queen Sophia, my dear friend, you will be greatly missed.

Good luck, Electress Caroline

1706

William Jones proposes using the Greek letter π to represent the ratio of the circumference of a circle to its diameter.

Newt. The first Latin edition of Opticks was just published!

³⁰ Anne (6 February 1665 – 1 August 1714)[1] became Queen regnant of England, Scotland and Ireland on 8 March 1702. Anne's life was marked by many crises, both personally and relating to succession of the Crown and religious polarisation. Because she died without surviving children, Anne was the last monarch of the House of Stuart.

Leib. Bartholomew Des Bosses³¹ is a good guy, it is very fun to discuss philosophy with him.

Bartholomew has had a lot of good points about my philosophy.

1707

John Floyer, in The Physician's Pulse Watch, introduces counting of pulse rate during one minute.

Newt. Arithmetica universalis³² was just published!

Leib. Chinese culture is so interesting. Understanding their civilization's customs and language could help you understand yourself.

31 Bartholomew Des Bosses (August 29, 1668, Chaineux - Avril 17th, 1738, Cologne) was a Jesuit theologian and philosopher, known mainly for his voluminous correspondence with Leibniz.

32 The Arithmetica touches on algebraic notation, arithmetic, the relationship between geometry and algebra, and the solution of equations.

1708

Leib. Everyone check out the preface that I wrote in the copies of Ernst Soner's book.

Newt. :)!!!!!!

Sir Isaac Newton. I like the sound of that.

Leib. Nvm... they decided not to publish it. :
(

Newt. I'm glad the queen appreciates my contributions to science.

1709

The folding umbrella was invented, during the reign of the Sun King.

Newt. just moved into a new house...
welcome cakes are certainly welcome

Leib. I can't believe i just spent 3 hours writing this letter to Toland!³³ <http://www.leibniz-translations.com/toland1709.htm>

1710

Jakob Christof Le Blon invents a three-color printing process with red, blue, and yellow ink.

Leib. is publishing a book on my philosophies! Theodicy is coming to a bookstore near you!

Newt. moved... again... and published De natura acidorum, Enumeratio and De quadratura Lexicon technicum

1711

John Shore invents the tuning fork.

Newt. Published Analysis per quantitatum

33 John Toland (30 November 1670 – 11 March 1722) was an Irish rationalist philosopher and freethinker, and occasional satirist, who wrote numerous books and pamphlets on political and religious philosophy, which are early expressions of the philosophy of the Age of Enlightenment.

Leib. I'm so clumsy. Just fell and hurt myself... not a fun day.
Hates having gout, and it's acting up again. And this abscess in my leg makes it hard to walk... I get all the health problems...

1712

Leib. Just moved to Vienna! hoping to stay here for awhile.

Newt. Posed for a portrait, and if I may say so, I do look smashing.

Leib. has been appointed Imperial Court Councillor to the Habsburgs! Woo hoo!

1713

Daniel Gabriel Fahrenheit creates the first mercury-in-glass thermometer.

- Newt.* Just had *Commercium Epistolicum*³⁴ published! check out a copy! 2nd edition of *Principia* comes out soon.
- Bern.* Leibniz, I was reading *Commercium Epistolicum* and the Brits are just trying to take credit for all of the discoveries in Europe.
- Leib.* Bernoulli, I know! it's full of false things, can you look into it? It has idiotic arguments... Thanx.
- Bern.* Leibniz, they said tht u stole the ideas of calc, but thts what Newton did! He couldn'tve grasped anything til he read ur works.
- Leib.* Bernoulli, why did I say all those nice things about Newton before? I wish I hadn't.

34 The case against Leibniz, as it appeared to Newton's friends, was summed up in the *Commercium Epistolicum* of 1712, which referenced all allegations. That document was thoroughly machined by Newton.

1714

The British government establishes the Board of Longitude to administer the longitude prize.

Leib. Going to Vienna to see
@ThomasBurnet

Writing Monadologie to tell the world my philosophies, which are correct.

is going to create the best scientific society... complete with lab, library, observatory, botanical garden, & med school!

Can't get enough money for my society =[

Newt. has been trying to write a reply to the "great Leibniz", but can't find the words to publish

Leib. thank you to all of those who have sent me important information about Newton, at least I have some people on my side...

is creating my own *Commercium Epistolicum*, which will be far more accurate than Newton's because it includes ALL relevant documents.

Bernoulli, many distinguished men there in England do not at all approve the boldness of Newton's toadies.

Bernoulli, I'm resolved to publish some correspondence of my own, so it will appear how weak Newton once was in other respects.

doesn't want to go back to Hanover yet... but now I'm not getting paid, so maybe I should just go...

RIP Sophie =[– June 8

First Sophie and now Queen Anne?... what's next? Now going back to Hanover...

Sorry about your mom, but congrats on the throne, King George I!

In Zeitz. Just saw a dog who can say chocolate and coffee! What is this world coming to?

Newt. Keill,³⁵ don't tell anyone... please...

Cham. Leibniz, why do you waste your time trying to win credit for calculus? You should share the credit and just be friends.

35 John Keill (1 December 1671 – 31 August 1721) was born in Edinburgh, Scotland, and was primarily a mathematician and important disciple of Isaac Newton.

- Leib.* Chamberlayne, no. He unfairly discredited me in Comm. Epistolicum and I doubt if he even invented calc before reading my works.
- Newt.* Chamberlayne, I'm not going to retract anything... that was true documentation.
- Leib.* Chamberlayne, hey, I sent you an email, could you submit it to the Royal Society please?
- Bern.* Leibniz, a mistake was found in Principia a few years ago, Newton prolly didn't know wht he was doing, u should be the inventor!
- Leib.* That's right, I'm writing a meditation on Newton. What's he going to do now?
- Bern.* Leibniz, way to b anonymous with the Charta Volans... its SO obvious tht you wrote it... but its circulating extremely well in Europe
- Leib.* Bernoulli, look, I don't want to fight head on with Keill. He is so much younger and less intelligible than me...
- Bern.* Leibniz, I have the best idea! We can prove the Brits inferior by posting a really hard problem that's 2 hard 2 solve w/ calc!

- Leib.* Bernoulli, great idea! I'll tweet Abbe Conti about it right now!
- Conti, I emailed you a problem, see if anyone can solve it.
- Cont.* Leibniz, a lot of people solved the problem you gave me, very easily actually...
- Leib.* Conti, ahh
- Wolf.* Leibniz, Keill has such childish reasoning!
- Leib.* Wolfius, I know! I cannot reply to such a crude man... his writing is hardly worth reading...
- Wolf.* Leibniz, you know what I heard? That Keill goes to bars with students... he likes the wine and the ladies if you know what I mean...
- Leib.* Together with Newton, I'm encouraging others to use twitter as a way to learn some of the history of math.

1715

The first recognised fire extinguisher is invented.

- Bern.* Leibniz, I do not want to be in the middle of this “calculus war.” Please keep me out!
- Leib.* Bernoulli, be a man! I need your help!
- Bernoulli, sorry man, but I might have let slip that you were the author I wrote about in Charta Volans...
- Newt.* Bernoulli, I found out about Charta Volans... you aren't even a real mathematician!
- Bern.* Newton, he wasn't talking about me, I swear!
- Keil.* Chamberlayne, if Leibniz makes any more noise, I will give the world a greater knowledge of his merits and candors!
- Geor.* Leibniz, you cannot go to London. You have to stay in Hanover and finish the family history! I am weary; my patience grows thin!
- Leib.* is trying to be the historiographer of England! Wish me luck!

- Geor.* Leibniz, I forbid it! You cannot be the historiographer! You MUST finish my family history first! This has gone on for too long!
- Newt.* the History of Fluxions has been published! Unfortunately, the author, Joseph Raphson, is not still around to see it.
- Leib.* History of Fluxions is totally biased toward Newton! Oh well, I'm already writing History and Origin of Differential Calculus.
- Newt.* is furious! The ambassadors and ministers in London can't even decide who invented calculus! They must be blind! This won't end...
- Cont.* Newton, the baron thinks that you should write to Leibniz. It's probably your best shot at resolving this feud...
- Newt.* There's an eclipse visible in Paris tonight. Invited some colleagues over to show off my new optical experiments.
- Cont.* Leibniz, sorry to be so blunt, but honestly, who invented calculus first?
- Newt.* Leibniz, it is up to you to prove your accusations of plagiarism against me! Go ahead, I'm ready!
- Leib.* Bernoulli, Newton has entered the ring...

Okay, let's be honest. We ALL know
Newton's going to get fragged. :]

Bern. Leibniz, good, now he has to defend
himself. I'm sick of people fighting
for him.

Leib. Just sent copies the letter exchange
between Newton and I to Paris.
I want all mathematicians to be
witnesses of this event.

1716

Leib. I am not the aggressor! I am not
accusing... Newton is!

Newt. has just written down some
observations about Leibniz's letter...

Leib. Bernouilli

Newt. Leibniz, way to change the
subject... ;)

Leib. Princess Caroline, I don't understand
Newton's take on gravity; it's
ridiculous! He relies on God to
explain everything!

Princess Caroline, why did you tell Samuel Clark what I said? Now he's bugging me and trying to defend Newton.

Geor. Leibniz, I don't care about your math dispute, I just need you to finish the family history. Hurry up.

Leib. have been lying in bed for 8 days, finally agreed to see a doctor...
-[*cough*

1717

Leib. Mehhh... this grave is too shallow...

Newt. Just published a revised version of Opticks... There's something eerie in the air...

Now that my nemesis is gone,
everyone will recognize that the
method of fluxions and fluents is my
unique invention!

Leib. Calculus... is... MINE!

1718

Newt. I met a wonderful young man by the name of William Stuckeley.³⁶ I think we'll grow to be good friends :)

Leib. Tossing... turning... ughhh... the integrals... the differentials! They're mine!

1719

Newt. The revised Latin version of Opticks is out, for all you Latin lovers. ;)

Leib. I wonder if Newton realizes that here in the afterlife, I'm ghostofLatin's best friend? TAKE THAT!

Newt. The eerie wind is blowing again... Distracting me from my studies... I need to create this philosopher's stone already.

³⁶ William Stukeley FRS, FRCP, FSA (7 November 1687 – 3 March 1765) was an English antiquary who pioneered the archaeological investigation of Stonehenge and Avebury and was one of the founders of field archaeology.

1720

Newt. The economy is depressing me, how am I supposed to retire after this South Sea Bubble³⁷ fiasco?

1721

The use of ether was developed as a pain-killer.

Leib. I have just learned the spell for causing kidney stones in the living. Hee hee...

1722

Rene Antoine Ferchault de Reaumur describes how to convert iron into steel.

Newt. Gosh man, where have the years gone....

37 The South Sea Company was a British joint stock company that traded in South America during the 18th century. Speculation in the company's stock led to a great economic bubble known as the South Sea Bubble in 1720, which caused financial ruin for many.

This stomach pain is keeping me up
at night... not that I ever sleep much
anyways.

1723

Newt. It seems that I am always needing to
pass water... getting old is not for me.

1724

French toast is developed by tavern owner Joseph French.

Newt. Complete misery with this nausea,
stomach pain, and constant need to
pee?

I'm getting to old for this whole
twitter thing.

Is it a bad sign if there's blood when I
pass water?

1726

For clocks, the gridiron pendulum is developed by John Harrison.

Newt. Felt fine a few days ago, but not so much now, just had to return home.
My nephew Conduitt has called the doctor.

I will not allow last rites to be given.
How insulting that they even tried.

Leib. Well... hello Newton... guess who published first in the afterlife?