

When they realised that I intended to write another Quizbowl pack, they concealed all conventional sources of information from me, so that I would commit no more wiki-ed crimes. They left me, alone, with nothing but a calculator to do my math homework. Little did they realise what horrors this would bring. I present: my vengeance.

- Nic

Oops! All Numbers!

Despite the ostensibly academic nature of the answers, this will likely be trashier than you'd expect. I'm aiming for wholesome, nutritious academic tossups, with tasty, trashy bonuses for dessert (I really have no clue why there are so many music bonuses, it just kinda happened). So without further ado, let's get cooking. Please do note that pencil and paper is strongly recommended for a few of the questions here, though they can be done without.

Toss-Ups

1. This number names a piece of United States anti-dumping trade policy, which has long been in dispute by the World Trade Organization. The name for that policy is the same as an operation in cryptography in which data is overwritten with this number. Various cultures independently developed this number, and treated it somewhat differently. It is widely thought that the Indian depiction was the basis for the Arabic and subsequent European depiction of this number. In binary logic, this number used to mean false. For ten points, name this number, the smallest non-negative integer.

ANSWER: 0

<ND - Math>

2. This square pyramidal number is the fourth in that sequence of numbers, and is the number of edges on both dodeca and icosahedrons. This number is the smallest sphenic number, the product of three unique prime numbers. The prefix quetta- denotes a multiplier of ten to the power of this number, the largest SI prefix designated so far. Zinc has this atomic number, though you might also associate this number with another element, silver. If you want to betray people for your payout, then becoming a United States senator isn't a bad way to get there, though for ten points, you'll need to be at least this old.

ANSWER: 30

<ND - Math>

3. Łukasiewicz (LOO-ka-SHEV-itch) logic was originally defined to handle logic with this many values. In electronics, the corner frequency of a system shows up at a magnitude of approximately this many decibels. There is no general closed-form solution for a problem with this many bodies, and a polygon with this many sides is the most stable shape. SI prefixes

change in bounds of ten to the power of this number. To make a play with this many outs, there have to be at least two runners on base and no outs. For ten points, name this number, the smallest odd prime.

ANSWER: 3

<ND - Math>

4. A world expo with this number featured the construction of a tower that was this many metres tall. This number is the smallest that can be summed from five non-consecutive Fibonacci numbers, and the largest whose standard name does not contain the letter n. It can have positive connotations in Chinese culture, though in the West it is more associated with Nazism. A band named for this number asks you to give them the hope to run out of steam. The Nails wrote 44 lines about this many women, using an instrument with this many keys. For ten points, give this number, the atomic number of radium.

ANSWER: 88

<ND - Math>

5. This number names a lottery scandal in Pennsylvania in which the Daily Number draw was fixed. This number is doubly triangular, meaning it is not only the sum of a sequence of natural numbers, but the number of numbers which sum to this number is itself triangular. This triangularity can be observed on the roulette wheel, despite there being either 37 or 38 slots. This number was the address of a home occupied by the Reagans, until Nancy insisted it be changed, due to her hexakosioihexekontahexaphobia (YOU-are-ON-your-OWN-suck-ER). This number is often viewed in a superstitious or religious manner, despite the fact that historical evidence suggests the middle digit should be 1. For ten points, name this number, colloquially known as the "Number of the Beast".

ANSWER: 666 (Prompt on 6 if given during the first sentence, accept triple six)

<ND - Math>

6. This number is the largest all-Harshad number, that is, a number which is divisible by the sum of the digits used to represent it in every base. If you count the middle, this is the largest number of unit circles which can be made to touch a central unit circle without overlapping. Relatedly, a grid of polygons with this many sides is the most perimeter-efficient way to divide a given area. There are this many edges on a tetrahedron, and this many sides to a cube. For ten points, sexy primes are pairs of prime numbers which are this far apart, for example, 37 and 43.

ANSWER: 6

<ND - Math>

7. This number is the first irregular prime. Caligula came to power in this year, and due to how the number following it is written in roman numerals, you can only have this many dogs with

the same name registered with the American Kennel Club. There are this many slots on a European roulette wheel, and for ten points, normal human body temperature is approximately this number in degrees celsius.

ANSWER: 37

<ND - Math>

8. This number is the largest known odd number which is not the sum of any number's factors, also known as an untouchable number. It appears in the centre of the Luo Shu square, a three by three magic square which sums to three times this number. A complete graph with this many vertices is the first non-planar graph. This number features prominently in many religions, including Sikhism, which has this many sacred 'K' symbols, and Islam, being both the amount of times per day a Muslim should pray to Allah, and the number of pillars they should adhere to. For ten points, how many cards am I holding in my hand after the river appears in Texas Hold 'Em?

ANSWER: 5

<ND - Math>

9. In the Book of Revelation, the throne of God is described as being surrounded by this many other thrones, with an accompanying number of elders seated in them. There are this many bits in so-called "true colour", the colour depth used by most modern displays. It's not thirty, but there are conventionally this many frames in one second of film, and this many seconds on an NBA shot clock. Both the Iliad and the Odyssey are divided into this many sections, as the Greek alphabet has this many letters. In conventional Western music, there are this many keys, and for ten points, the purity of gold can be measured in karats, with this number representing the highest degree of purity.

ANSWER: 24

<ND - Math>

10. Reader note: please click the link to start the timer *after* having *fully read* the question.

Halfway there! You've all done splendidly so far, so I think I'll give you all a break. Here's a simple bit of addition, with a generous amount of time to solve it in. (Pass out pencil and paper to each team). You have [90 seconds](#) to tell me, for ten points (or 15 if you're quick enough), the sum of the answers to the previous nine tossups. Remember, no talking, and you may not look at each other's paper. Power ends at 60 seconds. Go!

ANSWER: 859

<ND - Math>

11. A race of this many metres is somewhat uncommon, with most records for it being set during other, longer events, such the half marathon. In 1976, a game show doubled its prize to this amount, and in 1909, New York saw a strike of this many garment workers, at the time the largest strike by American women. The range of human hearing generally caps out at about this many hertz. [Rod Serling impressions welcome] Robert Wilson, thirty seven, is terrorised by a gremlin while flying this high in the air, in a journey to the Twilight Zone. In 1952, Ray Harryhausen animated a Beast from this many fathoms, and for ten points, Captain Nemo travels this many leagues under the sea in a novel by Jules Verne.

ANSWER: 20000 (Twenty thousand)

<ND - Miscellaneous>

12. This number is the emergency number in many different countries, including fire and medical services in Japan. It is also the Covid-19 assistance hotline in the United Kingdom. It also names a Chinese project to increase the amount of medals won in the 2008 Olympic games, and a far more insane American project to nuke the moon, which was tragically never carried out. For ten points, a nuclear reaction would be needed to produce Ununennium, the next undiscovered element, which has this atomic number.

ANSWER: 119

13. The United States military's concept of operations document for a zombie invasion is known by this number. Brutal military repression ended an uprising in Burma known by this number, due to key events occurring on the eight of August, 1988. In the Philippines, dialling this number will take you to a hotline for reporting government corruption and failure. A locomotive which bore this number undertook an impromptu break for freedom in Ohio when it was accidentally accelerated by its conductor, who had just exited it. For ten points, it's not 8.8.4.4, but Google's DNS server can be accessed at this IPV4 address.

ANSWER: 8888

14. This number is the limit of the formula one plus one over n, all to the power of n, as n approaches infinity. This was discovered by Bernoulli, when he was trying to solve a problem through which you are probably most familiar with this number, compound interest. A certain famous mathematician used this letter to represent this number in the 1700s, which resulted in this number being known by his name. It's not Euler's [emphasise] constant, but it is sometimes known by his name. For ten points, this number is the base of the natural logarithm.

ANSWER: 2.71... (Accept e. Accept Euler's number. Accept the sum of 1 divided by factorial n. Reject Euler's constant with a sad shake of the head.)

15. Look. You knew this number was going to be in here. Come on. It's gotta be one of the most famous numbers out there. I'm not even going to give you any clues, I'm just gonna hype it. It's been the source of infinite entertainment for mathematicians, and pops up in some truly bizarre

places. Finding novel ways to calculate it is practically its own meme, from throwing rice in a circle to frictionless blocks. All modern records for calculating this number have made use of the software y-cruncher, which has successfully brought humanity to one hundred trillion digits. For ten points, sing it with me (*Reader note: to the tune of Warrant's "Cherry Pie"*): "She's my number..."

ANSWER: 3.14... (Accept pi)

16. This number is the largest to be fully written out in the title of its Wikipedia page. This number is the product of every known Fermat prime: 3, 5, 17, 257 and 65537. In hexadecimal, this number is represented as F-F-F-F,F-F-F-F. The 2038 problem occurs because Unix time is a signed integer, meaning that half of the values of this number are occupied by negative values. For ten points, give this number, the largest possible value of an unsigned 32 bit integer.

ANSWER: 4,294,967,295 (accept $2^{32}-1$)

17. This number is triangular, and is a palindrome in four bases: in base 7, it is 606, in base 8, it is 454, in base 9, it is 363, and in base 13, it is 1A1. This is the highest possible score in ten pin bowling, and indicates a perfect game. Having won this many games is a notable threshold for pitches, and only twenty four have reached this milestone. This category of HTTP error codes is generally used to indicate to the client that some additional task must be performed, the most common use case is either a temporary or permanent redirect. For ten points, this many Spartans fought to the bitter end at the Battle of Thermopylae.

ANSWER: 300

An event partially named for this number involved the release of over a million balloons in Cleveland. A family of computer instruction set architectures, whose name is this number preceded by 'x', are the most popular architecture family for desktop computing. That architecture was initially based on a processor released by Intel in 1978, whose variants included the 8088, and isn't commonly used in smartphones, where ARM is more dominant. If you were to place an international call to China, you'd use this country code, and for ten points, if you wanted to get rid of something, for example, this pack, what soda jerk slang term could you use to say so?

ANSWER: 86

This number is prime, and is the only prime number which can be made by summing four consecutive prime numbers. This number titles songs from the Sex Pistols, Smashing Pumpkins, Jimmy Eat World and Heathers: The Musical. It is also the name of a 13 member K-pop group, and the group number of the halogens on the periodic table. There are this number of named elementary particles in the Standard Model, and in French, this is the first number with a compound name. For ten points, earlier on I asked you about a haiku, whose three lines sum to this many syllables.

ANSWER: 17

Bonuses

The concept for this pack could probably drive you to drink, or to escape into fiction. But why not both? For ten points each, answer some questions about fictional bars.

1.

This bar is home to the borderline dangerous "Nickel Shot Night", which according to John Mulaney, "should be illegal".

ANSWER: **O'Halligans**

Workers at Springfield's Nuclear Power Plant like to frequent this establishment, named for its grumpy and suicidal owner.

ANSWER: **Moe's** Tavern

Everyone knows your name at this bar, which is run by former Boston Red Sox relief pitcher Sam Malone.

ANSWER: **Cheers**

<ND - Comedy>

2. End of the semester, and you've all probably grown incredibly sick of staring at Brightspace for hours on end. So let's surf the web, and see what other cool websites we can see.

This website features a colourful logo, an infinitely spinning wheel, and a deep soothing voice, welcoming you to the website, and ensuring you that this is, in fact, this website. Previous iterations would invite you to sign up for a Newz Letter, but this part of the site was never operational.

Answer: **Zombocom**

This website was launched by Lowtax in 1999, and was the origin of several memes, including Slender Man. It is seen by many as an origin point for a large amount of internet culture.

ANSWER: **SomethingAwful**

One such piece of culture to originate from SomethingAwful was this other forum website, founded by the user moot after hentai was banned from the SomethingAwful forums, based on similar japanese chans.

ANSWER: **4chan**

3.

Due to its resemblance to a face, the Chinese character *Jiong*, which at one time translated to "patterned window", has been used to represent this emotion so ubiquitously that it has subsumed that previous definition in many contexts.

ANSWER: **Sadness** or **Embarrassment** (accept equivalents, be generous, it's contextual)

This mathematical symbol is often used in the construction of a piece of anatomy over text, alongside the number 3.

ANSWER: **less than** (accept **left bracket**)

The letters O, T, L, r and z can be used to represent this position.

ANSWER: **Kneeling** or **bowing**

<ND - Emoticon>

4.

Ah, leagues. What a... legendary unit of measurement. Please don't leave. I promise it's just one question.

This void-walker wields the Nether Blade of Horok, and seeks to kill the prophet Malzahar. His name translates roughly as "Whom does the desert know?"

ANSWER: **Kassadin**

Kassadin originally hails from this once-great desert empire, which was all but destroyed during the catastrophic failed ascension of their emperor Azir.

ANSWER: **Shurima**

Champions from Shurima include the jackal-headed Nasus and his brother Renekton, who take inspiration from this real-world mythology

ANSWER: **Egyptian**

<ND - Video Games>

5.

You know, this gathering is all well and good, but sometimes, I just wish Quizbowl would get back to its religious roots, you know? So for ten points each, let's bring some God into these bonuses.

This expletive combines the Lord with one of his favourite activities. It's been used for emphasis by many people over the years, including in a civil rights anthem by Nina Simone, and 245 times by J.D. Salinger throughout *The Catcher In The Rye*. (Note: I will accept an allusion to it if the answerer does not feel comfortable saying it aloud).

ANSWER: **Goddamn** (accept **Goshdarn** or **GD** so long as it is clear that they are using it to allude to the actual answer).

Getting a little tamer, this minced oath makes reference to the tools used in Christ's crucifixion, and modifies the Lord's name slightly so as not to cause offence.

ANSWER: **Gadzooks**

This well wish has titled many things over the years, including a Japanese documentary about some Black Emperors, and a satirical play about clergy members bestowing this blessing on a ploughman.

ANSWER: **Godspeed**

<ND - Language>

6. Okay, this is probably a terrible idea, but for ten points, I'm boutta hit 'em with that furry shit.

Probably the most well known aspect of furrydom is their use of these costumes, to represent their fursonas.

ANSWER: **Fursuit**

If you wanted to go see some fursuits, this convention probably shouldn't be your first choice, as its reputation for vandalism and other... *ahem* incidents, resulted in the Hilton Seattle Airport & Conference Center refusing to host them, causing it to shut down in 2015.

ANSWER: **Rainfurrest**

This emoticon, a variant of uwu (oo-woo), is used to denote curiosity, and is often accompanied by the phrase "what's this?".

ANSWER: **OwO** (oh-whoa)

7.

Unconventional explosive devices.

This explosive was invented during World War 2, and was named for the manner in which it was deployed against tanks by soldiers of the Imperial Japanese Army.

ANSWER: **Lunge mines** (Accept **Shitotsubakurai**)

In 1957, the United Kingdom considered implementing this project, which involved burying nuclear landmines, possibly along with chickens, in the North German Plain. Its name is oddly similar to a children's show from that country which began airing a year later.

ANSWER: **Blue Peacock** (Prompt on **Blue Bunny** and **Brown Bunny**).

This explosive device was activated in 2016, and made use of thermal runaway to achieve ignition. Despite its name, it was actually the sixth in that line of devices.

ANSWER: Samsung **Galaxy Note 7** (Prompt on any individual word in there)

<ND - Miscellaneous>

8.

Time to answer some completely random, unrelated questions! For ten points each,

George Orwell depicted regular, national, two-minute bouts of this emotion in 1984. Crimes described by this emotion are targeted at minorities.

ANSWER: **Hate**

Richard Linklater wrote and directed a trilogy of films titled for this relative temporal term. This term is used to describe roughly 99.9999853% of all time in the Anno Domini system.

ANSWER: **Before** (Anti-prompt on Before Christ or B.C.)

The two previous answers can both be abbreviated in text to what colour of square in algebraic notation?

ANSWER: **Black**

<ND - Miscellaneous>

9.

You've been working hard and finding numbers all pack, so let's take a break. For ten points each, let's find some non-numbers that X can represent.

X is the new name for this social media website, which was purchased and self-destructed by billionaire Elon Musk in 2022.

ANSWER: **Twitter**

Before this purchase, X.com was the former URL of another of Musk's projects, which later rebranded to this name under CEO Peter Thiel after Musk's firing. The two of them are both members of this so-called mafia.

ANSWER: **Paypal**

X is also the name of an R&D company owned by Google which pursues these types of technologies, so named because of their high risk, high reward nature. "Graduates" of X include Waymo, Google Brain and Loon, the internet balloon project.

ANSWER: **Moonshots**

<ND - Companies>

10.

Note: Two answers are required for each of these. Quizbowl really is, at its heart, all about teamwork, isn't it? Let's take a second to appreciate that, as we go over some less than perfect couples.

This couple were high school sweethearts, and the king and the queen of the prom. They married young, and quickly divorced after discovering their marriage couldn't last through financial hardships.

ANSWER: **Brenda** and **Eddie**

John Mellencamp sings a little ditty about these two kids, growing up in the American Heartlands. Their song is also rather bittersweet, with the chorus reminding us that life goes on long after the thrill of living is gone.

ANSWER: **Jack** and **Diane**

It's Lesley Gore's party and she'll cry if she wants to. After all, these two fairweather friends just walked in, one of them wearing the other's ring.

ANSWER: **Johnny** and **Judy**

<ND - Music>

11.

Songs of the suburbs

This band's third album 'The Suburbs', received critical acclaim and immediate success upon its launch. The music video for its lead single featured clips from a dystopian Spike Jonez short film which expanded upon the themes of alienation and loneliness discussed in the song.

ANSWER: **Arcade Fire**

This artist rewrote the titular single from his first solo album, 'Rockin' The Suburbs', for the 2006 animated comedy 'Over The Hedge' with William Shatner. While both are satirical, they poke at different topics, with the former riffing on nu metal bands and their 'white boy pain', and the latter criticising suburban living and consumerism.

ANSWER: **Ben Folds**

Jesus Of Suburbia is often considered to be one of this band's best songs. It was the final single off of their concept album 'American Idiot'.

ANSWER: **Green Day**

<ND - Music>

12. Man, all this quizzing is making me hungry! Why don't we visit some restaurants? For ten points each,

This song was used by the creator of the MP3 audio format as a quality benchmark, due to Suzanne Vega's warm acapella. In it, she describes a scene taking place on a rainy day in the titular location.

ANSWER: **Tom's Diner**

This late night scene is certainly painter Edward Hopper's best known work, and features three patrons in a downtown diner.

ANSWER: **Nighthawks**

This film documents a reunion between the fictionalised versions of two actors over a meal together at a restaurant.

ANSWER: **My Dinner With Andre**

<ND - Art>

12.

Tall and tan and young and lovely, the main character of this bossa nova jazz standard makes everyone she passes sigh.

ANSWER: **The Girl From Ipanema**

The narrator of this hit power pop number wishes that this girl was in a relationship with him, rather than his best friend.

ANSWER: **Jessie's Girl**

This girl's been living in her white bread world, getting tired of her high class toys. Olivia Rodrigo references this song about this girl in 'Deja Vu'.

ANSWER: **Uptown Girl**

<ND - Music>

13.

Alright, time to turn it around. Enough girls, let's focus on the fellas. For ten points each, answer some questions about famous men.

The Beatles wrote a song about this man, who took nineteen for him, and left one for them.

ANSWER: **Taxman**

Taxman is just one of the many knockoffs of this man. He was created by Iwatani Tōru for Namco. His name was modified slightly from its original Japanese onomatopoeia, as it could easily be turned into an obscenity by vandals.

ANSWER: **Pac-man** (Prompt on puck-man)

Mario no longer goes by this name, which was bequeathed upon him during the development of Donkey Kong.

ANSWER: **Jumpman** (Prompt on Mr. Video by pointedly asking if they've noticed the answer format)

<ND - Pop culture>

14.

You've all been great with your numbers so far. C'mon kid, let's see how you fare in Vegas. For ten points each,

Keeping track of the count is a good way to play the odds in this card game.

ANSWER: **Blackjack** (Accept **21** and **vingt-et-un**)

After being run out of the casino for card counting, you go looking for some action on the streets. No, not that kind, get your head out of the gutters. Similar premise though. All you have to do is find the lady. How are you about to get hustled?

ANSWER: **Three-card monte**

You've been kicked out of the casino, tricked out of your money with the monte, you feel like throwing your deck in frustration. If you do, assuming you don't want to also be charged with littering, then you'll have the chance to play this game, popular with tricksters and sore losers.

ANSWER: **52-card pickup**

<ND - Card Games>

15.

A radical priest got the narrator released and on the cover of Newsweek after he was jailed for doing *something*, which Paul Simon presumed was sexual, with this character.

ANSWER: **Julio**

This company has made use of implications in their advertising from the 90s onwards, when they discovered through focus groups that lesbians were four times more likely to be customers than the average consumer.

ANSWER: **Subaru**

Some shows make use of this often-criticised technique to try to appeal to queer audiences without alienating more conservative viewers.

ANSWER: **Queerbaiting**

<ND - Pop Culture>

16. I really hope that none of you have been cheating on this. For ten points each,

Despite being caught red-handed in the shower, on the counter, and the bathroom floor, Shaggy still tries to get out of it with this truly flawless excuse.

ANSWER: **It Wasn't Me**

Billy Paul has a thing going on with this woman, who he meets every day at the same café- 6:30, he knows she'll be there. However, despite the plans they make, they are cautious to not get their hopes up too high, as they both have their own obligations.

ANSWER: **Mrs. Jones**

Now let's go from Philly soul to Motor City, where Marvin Gaye had to hear about his girlfriend's infidelity this way.

ANSWER: Through the **Grapevine**

<ND - Music>

17. In a sense, this question pack is like one long letter from past me to present you. A long, passionate piece of hate mail. For ten points each, let's look at some other epistolary works.

This novel is composed of two letters, in which Frances details the sexual exploits of her early life to an unnamed Madam. It is one of the earliest examples of the English language being used to write pornographic contents, and among the most commonly banned novels.

ANSWER: **Fanny Hill**

Cleansing ourselves of that filth, this Christian apologetic novel is made up of letters written from a demon to his nephew, Wormwood. With the exception of his Chronicles of Narnia, it is probably the author's best known work.

ANSWER: **The Screwtape Letters**

This song samples Dido's "Thank You" for its chorus, whereas its verses are made up of a series of letters (and one voice recording) between the singer and this obsessive fan. That fan's name is now used both derogatorily and self-referentially to describe obsessive fan behaviour.

ANSWER: **Stan**

<ND - Epistolary Fiction>

18. You might consider writing in the form of letters to be enough of a constraint, but sometimes, authors want to take it a step further. For ten points each,

"Gadsby" and "A Void" are both novels written with the intention of dodging this character, the most commonly used letter in both the English and French languages.

ANSWER: **E**

This writing constraint
"Five, seven, five" creates this
Japanese poem

ANSWER: **Haiku**

"Lion-Eating Poet in the Stone Den" abuses Mandarin's tonal system to construct a poem composed entirely of words with these distinguishing attributes.

ANSWER: **Single Syllable Homophones** (Prompt on Single Syllable and Homophone by asking what else is notable about them. Accept **Monosyllabic** in place of **Single Syllable**).

19.

Director Matt Johnson received moderate critical acclaim in 2023 with this comedy film, which depicted this famous Canadian technology company.

ANSWER: **Blackberry** (Prompt on Research In Motion or RIM by asking for their current name)

Matt Johnson declined to premiere his 2016 film "Operation Avalanche" at this festival, out of concern that it would be overlooked due to how many other films premiered there. This festival has run each September since 1976, and is one of the most prestigious annual film events.

ANSWER: **Toronto International Film Festival** (accept **TIFF**)

This government agency has produced over 13,000 works since its inception in 1939. Some controversial productions include the anti-war stop motion film "Neighbours" and the anti-pornography film "Not a Love Story: A Film About Pornography".

ANSWER: **National Film Board** (Accept **NFB**)

<ND - Canadian Film>

20. And now, once again, we've reached the end. So for ten points each, let's hear some closing remarks.

This phrase was said by Christ before he took his last breath, as well as a three-day vacation to somewhere warmer.

ANSWER: **It is finished**

In Shakespeare's "Julius Caesar", Caesar cries out this latin exclamation, expressing his betrayal, as he is assassinated by the subject of the exclamation and his fellow senators.

ANSWER: **Et tu, Brute?**

This monologue, delivered in inclement weather on a rooftop in Los Angeles, reflects on the life of the speaker. He's seen things you wouldn't believe, and now these moments are all lost in time, like this fitting metaphor.

ANSWER: **Tears in rain**