

A Student's POV

**HOLIDAYS**

MENTAL HEALTH DAYS

*Meet Ms Pyke*

**DUCK!**

**UNIVERSAL HEALTH CARE...**

AND WHY YOU NEED TO CARE

SPORTS DAY 2021

**VIRTUAL SLUM TOUR**

*The Most Beautiful Equation*

**TANGO**

# Mental Health Days

*Kokoro Ishiuchi -Ray*

With the onset of the coronavirus pandemic and adapting to a new life, many students may be finding it difficult to balance school and their mental health. According to the Japan Times, childhood suicide has '...Reached a record 499, and the pace has accelerated since may of last year.' In an attempt to increase mental well being, Japan is introducing a new curriculum guideline in high schools, reintroducing mental health education.

I feel that this is being introduced a bit too late, but I do think that it is a step in the right direction. Although sois has mental health counselors, I think that collectively we need to be doing more to protect students' mental health.

I propose that the school implement **Mental Health Days**. When we are sick, we stay home and take care of our bodies by resting. Why should we not do the same for our brain? Mental health days would allow students to take a certain number of days off a trimester to allow for self care and prevent one's mental health from degrading. Students who suffer from pre-existing mental illnesses would feel more

understood and seen, and students whose mental well being is suffering will be able to take care of themselves before the mental health issue turns into a mental illness. Although it isn't unlikely that students would fake a mental health day, similar to faking a sick day, I think it's more important to focus on the good the implementation of mental health days can do.

It's no secret that I struggle with my mental health. I struggle with depression and anxiety, and trying to balance academics while ensuring that I don't spiral is extremely difficult. Mental health days have helped me in the past, and are an important part of why I am still here today. The school I was at during the academic year of 2019-2020 had mental health days, and it was as simple as having a guardian call the school and inform them that I was taking the day off to take care of myself. At the time, I didn't have any ways of coping, and I mostly just slept the whole day. I eventually realized how bad things had gotten, spoke to the counselor, and got the help I needed. Things aren't perfect, but they are much better than they were 2 years ago. I don't wish for anyone to go through what I did, and I urge the school as a whole to take students' mental health more seriously. I firmly believe that taking even one day off to focus on yourself, no school, no chores, no responsibilities, can make people feel safer and allow them to take care of their issues before it's too late.

Of course, just taking the day off isn't going to fix anything, but it could be the first step to a better state of mental well being. I urge students and teachers alike to start discussing mental health, and reduce the stigma surrounding the topic of mental illness.

# TANGO

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## SOURCES

Origin of Holidays

1 Aine Cain. "The Dark History behind Halloween Is Even More Chilling than You Realized - Business Insider." Business Insider, Business Insider, 31 Oct. 2017, [www.businessinsider.com/history-of-halloween-2017-10](http://www.businessinsider.com/history-of-halloween-2017-10). Accessed 13 Nov. 2021.

2 Grannan, Cydney. "Why Do We Carve Pumpkins at Halloween?" Encyclopædia Britannica, 2019, [www.britannica.com/story/why-do-we-carve-pumpkins-at-halloween](http://www.britannica.com/story/why-do-we-carve-pumpkins-at-halloween). Accessed 15 Nov. 2021.

3 Hillerbrand, Hans J. "Christmas | Origin, Definition, History, & Facts." Encyclopædia Britannica, 8 Feb. 2019, [www.britannica.com/topic/Christmas](http://www.britannica.com/topic/Christmas). Accessed 15 Nov. 2021.

4 Pack, David C. "The True Origin of Christmas." Rcg.org, [rcg.org/realtruth/articles/169-itooc.html](http://rcg.org/realtruth/articles/169-itooc.html). Accessed 15 Nov. 2021.

5 Petkar, Sophia. "Ever Wondered Where the Term 'Christmas' Came From?" The Sun, 15 Nov. 2018, [www.thesun.co.uk/fabulous/1963302/christmas-term-meaning-why-shorten-xmas/](http://www.thesun.co.uk/fabulous/1963302/christmas-term-meaning-why-shorten-xmas/). Accessed 15 Nov. 2021.

6 The Editors of Encyclopædia Britannica. "Santa Claus | History, Legend, & Facts." Encyclopædia Britannica, 11 Nov. 2021, [www.britannica.com/topic/Santa-Claus](http://www.britannica.com/topic/Santa-Claus). Accessed 15 Nov. 2021.

7 -. "St. Nicholas | Biography, Facts, & Feast Day." Encyclopædia Britannica, 14 Mar. 2018, [www.britannica.com/biography/Saint-Nicholas](http://www.britannica.com/biography/Saint-Nicholas). Accessed 15 Nov. 2021.

Universal Health care

1, "新型コロナの入院費用、平均83.3万円 米調" CNN <https://www.cnn.co.jp/usa/35177133.html>, 9/29/2021

2, Universal health care, Wikipedia [https://en.wikipedia.org/wiki/Universal\\_health\\_care](https://en.wikipedia.org/wiki/Universal_health_care) 10/28/2021

3, "こくみん共済、コロナに感染してしまったら、医療費はどうなるの？医療保障を考えるポイントをチェック" ！, 全労済, <https://www.zenrosai.coop/anshin/hosho/34081.html> 10/28/2021

## TANGO

Welcome back to Part 3 of "Tea Time with Tanishka". If you're lacking motivation, unsure whether to pursue something new, or full of anxiety about your next task, this one's for you. Note that as always, this is my analysis of what these quotes mean and how I personally think they could help other people. Feel free to interpret them in a different way and if you do in fact find a new meaning through it, let me know!

Image Provided by Tango Production Staff

"Where your fear is, there your task is"

When a new opportunity arises, we weigh the pros and cons to determine whether it's something we want to pursue. For a lot of people, this process includes a lot of anxiety about the uncertain future. We fear that we will make the wrong decision. We fear that we might not be capable. We fear that it won't be worth it. "Where your fear is, there your task is"; this means that the thing that scares you the most should be what you should aim to actually achieve. If you're scared of joining the debate team because you're scared you're not good enough, then your task is to at least try it out. You won't gain anything by living in fear of what it could be. Instead, the fact that something scares you, should be your motivation to try it out.

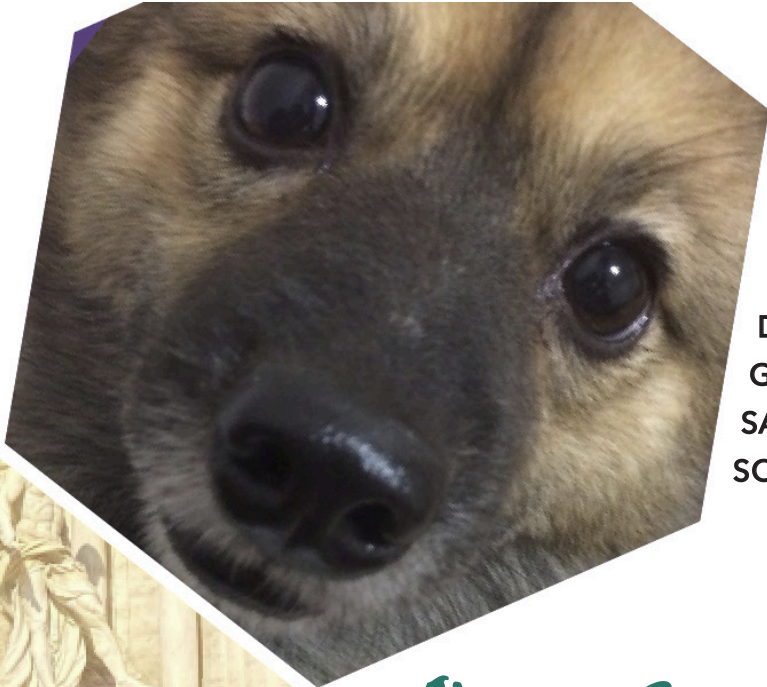
「やらずに後悔するならやっつて後悔しよう」

よく耳にする言葉ですよこれ。ほとんどの人が身にしてみても感じたことのあることなのではないでしょうか。新しいことに挑戦しようと思ったときに、不安や緊張のあまり、やっぱりやめておこうなんて言ってしまった経験などありますよね。挑戦するのを諦めたとき、後から「やっつておけばよかったのになあ」なんて思ったことはありませんか？やっつてみないと、成功も失敗もありません。やっつてみれば50%の確率で成功します。失敗したら、後悔するのはありえます。でもその後悔が学びに繋がるとは思いませんか。つまり、挑戦した人が経験する失敗は学び、挑戦しない人が経験する失敗はやっつてみなかったというただの後悔。だから、挑戦しなかったことを後悔するより挑戦してみた結果の失敗を悔しむことの方が価値あるものになります。やらずに後悔するならやっつて後悔しよう！

Tea  
Time  
With  
Tanishka

Tanishka Murthy

ムルティタニシカ



MS. PYKE IS A NEW MYP INDIVIDUALS AND SOCIETIES AND ENGLISH TEACHER AT OIS. IN ORDER TO INTRODUCE HER TO TANGO READERS, REPORTER XI GONG SAT DOWN WITH MS. PYKE TO ASK SOME QUESTIONS.



# Ms Pyke MEET



**Q: PLEASE INTRODUCE YOURSELF. (HOBBIES, FAVORITE COLOR(S), FAVORITE FOOD, HOMETOWN ETC...)**

My name is Kendal Pyke, I am from a little town in Alabama called Somerville, but it's very close to Huntsville. I have lived internationally since 2012, and I have a lovely dog. His name is Koro. He is from Amami Ōshima, which is an island close to Okinawa. My favorite food... ummm, I don't know if I have a favorite food; I like all kinds of food. I think it's

better to say what I don't like. I don't like beets, and it's probably the only food I don't like. My favorite color is green, definitely, but lately I've been really into yellow.

**Q. WHY DID YOU WANT TO BECOME A TEACHER?**

I never considered being a teacher, actually. I studied International Relations in university, and the year before I graduated, I had to take an international internship. So, I was living and working in Morocco, in North Africa, when I was 21. And like all 21-year-olds who are doing a job where they don't make any money, I ran out of money. Haha. So I needed to do something to make money while I was in Morocco. Then I started to teach English, just for extra money, and realized I was very good at it. I really liked it, and I

was one semester away from graduating, so no reason to change my degree to education, right? After I graduated with my bachelor degree in international relations, I started working on my teaching certification. So I have never used my bachelor degree. Haha.

**Q. WHAT IS ONE THING YOU LIKE THE MOST ABOUT OUR SCHOOL?**

There are so many things that I like, but I think overall the students. I think the students have just a great attitude about teaching and learning. Everyone is really eager to share their opinion, and I don't really have to encourage the students to participate. It's like they want to participate. (Interviewer: "For Grade 7, yeah?") Yeah, yeah, for Grade 7, but also Grade 6 and Grade 8.

**Q. WHAT KIND OF EXPECTATIONS DO YOU HAVE OF YOUR STUDENTS?**

Genuinely, I don't. I think it would be unfair for me to come in and expect the student population to be a certain thing, right? I think it's more my responsibility to kind of accept who you are as a student population and then try to help you achieve your learning goals within that context.

**Q. WHAT ARE YOUR SHORT-TERM AND LONG-TERM GOALS IN THIS SCHOOL?**

I really want to teach Theory of Knowledge (TOK) and hopefully that will happen next year.

**Q: MAYBE TELL US ABOUT SOMETHING THAT YOU WOULD LIKE YOUR STUDENTS TO LEARN FROM YOU.**

Ahh, I hope they learn a lot of things, but I think it's really important in life to find the positive aspects of failure. Because you are always going to fail at some point in your life, right? I hope that students learn from me that making mistakes is not a problem, and that making a mistake is something you can grow and learn from. So, that's really something I am trying to focus on in the classroom.

**Q. IF YOU WERE GOING ON AN EXPEDITION, AND COULD ONLY TAKE ONE THING, WHAT WOULD YOU TAKE?**

My dog. (Interviewer: Wow! What a great relationship!)

**Q. TELL US ONE THING OR MORE THINGS ABOUT YOURSELF THAT PEOPLE AT THIS SCHOOL MIGHT NOT KNOW ABOUT YOU YET.**

It's hard to think of one... Umm, here is something about me. Before COVID, I traveled extensively. Ok, do you know

the game *Where in the World is Carmen Sandiego?* (Interviewer: Sorry, no.) So, when I was little, *Where in the World is Carmen Sandiego* was a really popular book, and a

game. I used to play the game all the time, and it was like a geography game, so you would learn a lot about different places in the world. (Interviewer: That's why you are so good at geography!) Right, yes, I like geography. So I had this list of places that I learned about from that game

that I want to visit. And I visited all of them except for two. The two I had left to visit were Prague in the Czech Republic, and the Côte d'Ivoire, in Africa. Two years ago, I planned holidays to go to these places, so that I could finally see all of my *Where in the World is Carmen Sandiego's* locations. My trip to Prague was planned for April 2020. And my trip to West Africa was planned for the summer of 2020. So I did not get to go to either of them, which means I still have two more places to visit on my list of places that I learned about. (Interviewer: Good luck with that! Hope you can go to these two places soon!) Yeah, I have been to quite a lot of different countries, and I really enjoy traveling, and I miss it.

Interviewer: Thank you so much for your time and information, Ms. Pyke. I'm sure that our TANGO readers know you better as a teacher now!

I never considered being a teacher... actually.

"I hope they learn a lot of things, but I think it's really important in life to find the positive aspects of failure."

PERHAPS NOT ALL OF US HAVE BEEN THERE, BUT MOST OF US HAVE. YOU'RE IN THE SCHOOL LIBRARY STUDYING WITH YOUR GROUP OF FRIENDS, WHEN A SIMPLE QUESTION ABOUT HOMEWORK HAS GRADUALLY EVOLVED INTO A FULL BLOWN DEBATE ON SCHOOL DRAMA AND THE NBA. YOU AND YOUR FRIENDS ARE ALL HAVING A CRACKING TIME WHEN YOU HEAR A VOICE FAR TOO FAMILIAR.

"*QUIET DOWN PLEASE, THERE ARE PEOPLE TRYING TO STUDY HERE!*"

"*IF YOU WANT TO SOCIALIZE, GO SOMEWHERE ELSE!*"

FROM A STUDENT'S POV...  
**WE'VE ALL**

**BEEN THERE**

by Sang Hyun Kim



You roll your eyes and mutter to yourself that you weren't even being that loud. In all honesty, I find myself in this situation at least twice a week as well, and it's a common occurrence in the SOIS library. Whenever I'm warned for being too loud, I find myself wishing for the librarians to just let high school students be high school students: young, loud, and always looking for fun.

On the flip side however, I think we've also all been in a scenario where you're in the library with earphones plugged in as a means of blocking out any distractions that might lead to you not finishing that 4000 word essay due 9PM. Now, imagine if a bunch of strangers sat next to you and started babbling about who's dating who or how ridiculous Travis Scott's Astroworld Concert apology was. I can't say for sure how others would react, but I would probably want to break my laptop in half and send an email to Mr. Frater about dropping the IB Diploma Programme in a fit of rage and panic.

I think maturing is realizing that there are two sides to every story. In this case, I think it is important for us to remind ourselves that the library is indeed a study space. Countless students who are undergoing quite possibly some of the most academically challenging years of their lives are using the library as a place to get work done. Although socializing with friends is absolutely merry, I would have to admit that the librarians are right when they warn me for being too loud in the library.

The big question I feel people aren't asking enough however, is where students should go to socialize as an alternative to the library. The librarians tell students to find somewhere else to socialize, but from my point of view as a student, the library seems like the best place for socializing around the school campus. The common alternative locations suggested by teachers are the field, cafeteria, and "Student Lounge". All these locations seem to be missing something, which deters students from socializing there.

## The big question I feel ... is where students should go to socialize...

The field is a perfect place for playing sports for sure, but that does not translate to it being a good spot to socialize, in my opinion. First off, there are no places to sit comfortably, unless you are okay with lying down on straight turf. The field is also an outdoors environment, which comes with a myriad of problems when considering a spot to socialize in. The outdoors can be extremely hot, extremely cold, or even extremely wet, making it unattractive for students looking to find a comfortable space to socialize.

Don't even get me started on why it's called a "Student Lounge", hence the quotations. It

is essentially an extension of the cafeteria, and is a place more dedicated for students to eat than to socialize and lounge in. All the tables are set up facing one direction amidst the Covid-19 pandemic making it difficult to converse, and the chairs are made of wood and steel which most students might find uncomfortable to sit on for long periods of time. The cafeteria is the exact same case, but even more difficult as it is a designated place for students to eat in.

The library is almost the perfect place for socializing when taking into account all of these factors. The library has heating and air conditioning, making it comfortable for all seasons; soft, mesh chairs facing each other, encouraging conversation; and a welcoming environment with warm lighting. The recently revamped library is extraordinarily well designed and cozy, almost to the point where I feel like the rest of the school might now be lagging behind when it comes to student social welfare. From a student's point of view, I feel like there is now a dilemma for students as we wish to socialize with our friends in a respectful manner, but that becomes a challenge when the best place to socialize is the library. As our school is planning to gradually revamp and update other parts of the campus, I have high hopes for a proper lounge of sorts with an environment which encourages students to have fun and socialize away from the library. A win-win situation where students can study peacefully in the library, and enjoy each other's company in the lounge doesn't sound too bad, right?



# AN EPIDEMIC SIMULATION

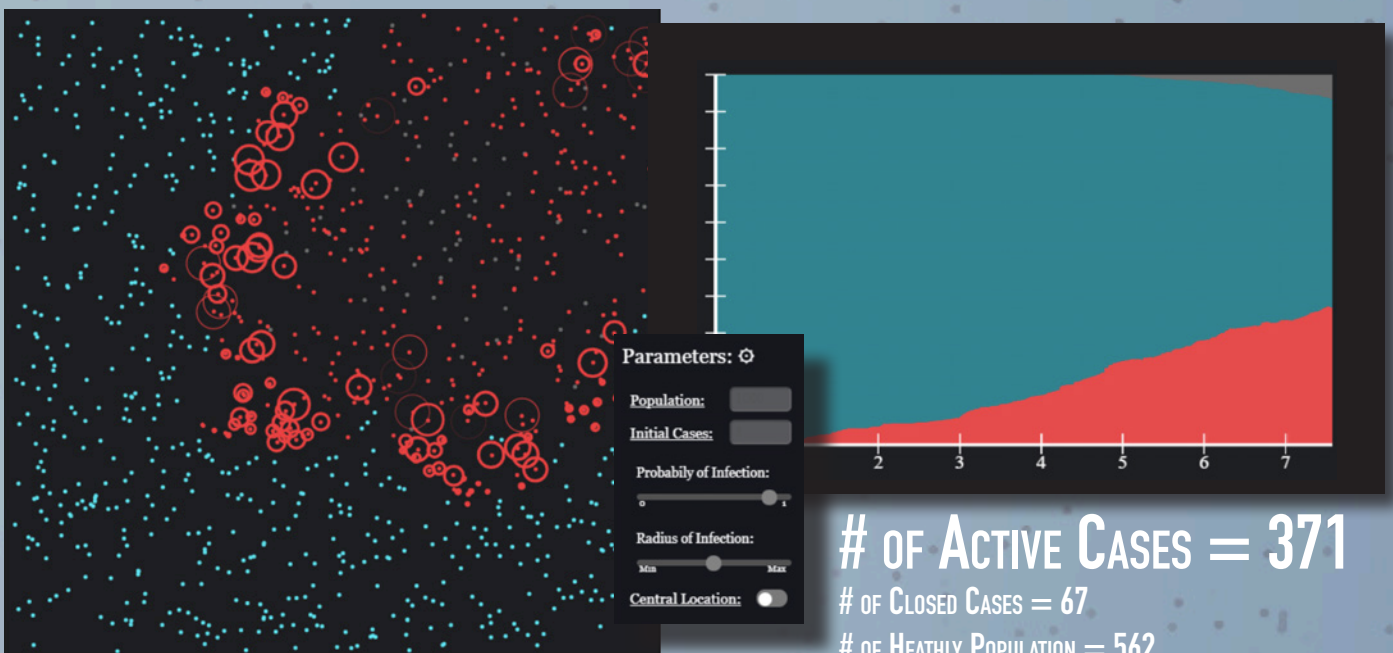
*Tadayoshi Kamegai*

## A CODING PROJECT BY A TIRED STUDENT

OVER THE 2020 SPRING BREAK, I GOT INVOLVED IN A "HACKATHON" THAT TWO FRIENDS OF MINE AT NIS WERE HOSTING. A HACKATHON IS A CODING COMPETITION WHERE PARTICIPANTS CREATE CODED PROJECTS (BASED ON A TOPIC DECIDED BY THE HOSTS) IN A LIMITED AMOUNT OF TIME.

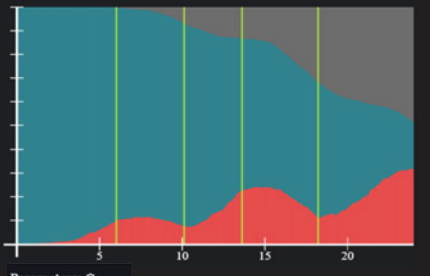
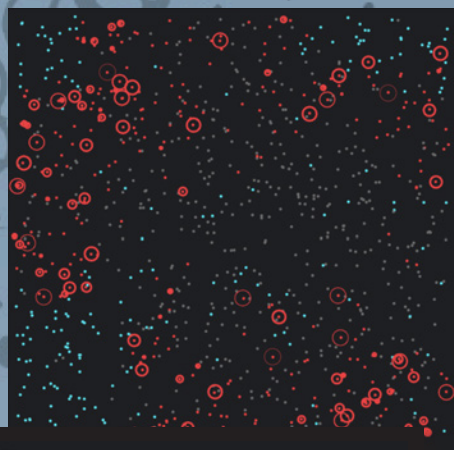
FOR THIS EVENT, THE MAIN THEME WAS 'POST-CORONA', SO I GOT INVOLVED BY MAKING AN INTERACTIVE COVID SIMULATOR WITH ABOUT 10 PARAMETERS, TO RAISE AWARENESS ABOUT THE IMPORTANCE OF KEEPING SOCIAL DISTANCING, WEARING MASKS, STAYING AWAY FROM POPULATED AREAS, QUARANTINE, AND THE DANGERS OF PATIENTS THAT DON'T SHOW SYMPTOMS.

USING A SIR MODEL, I CREATED THIS SIMULATION THAT SHOWS HOW THE POPULATION MAY BECOME INFECTED (A VERY SIMPLE MODEL AS YOU MIGHT BE ABLE TO TELL), TO ILLUSTRATE NOT ONLY COVID BUT OTHER EPIDEMICS AS WELL.



TO SORT OF SHOW WHAT THE SIMULATION IS LIKE WHEN USING IT, THESE TWO IMAGES ATTEMPT TO ILLUSTRATE WHAT THE USERS SEE WHEN USING THIS SIMULATION. THIS IMAGE ON THE TOP IS THE DEFAULT SETTING, WHERE PEOPLE KEEP GETTING INFECTED IF NO-ONE DOES ANYTHING TO THE ENVIRONMENT, UNTIL THERE IS LITERALLY NO ONE LEFT TO INFECT.

TO SHOW WHAT CHANGING THE PARAMETER CAN ACTUALLY DO, I'LL TRY TO SHOW WHAT THE 'SOCIAL DISTANCE' BUTTON DOES. THE LOWER IMAGE IS ACTUALLY SHOWING HOW



Parameters: ☐ ☐

Population:

Initial Cases:

Probability of Infection:

Radius of Infection:

Central Location:

# OF ACTIVE CASES = 319

# OF CLOSED CASES = 487

# OF HEALTHY POPULATION = 194

INFECTION SLOWS DOWN SHORTLY AFTER PEOPLE START TO SOCIALLY DISTANCE (AS REPRESENTED BY YELLOW LINES), AND HOW INFECTION SIGNIFICANTLY INCREASES AFTER ONE STOPS SOCIAL DISTANCING. YOU CAN THINK OF THIS AS THE NATIONAL STATE OF EMERGENCY, WHERE EVERY TIME IT COMES OUT, INFECTION DECREASES, BUT A LITTLE AFTER IT IS GONE, INFECTION STARTS TO BUILD UP AGAIN.

THIS SIMULATION WAS SOMETHING I CREATED AS SORT OF A SIDE HOBBY, BUT TURNED OUT TO BE DECENTLY EFFECTIVE IN SHOWING WHAT HAPPENS IN REAL LIFE. I ALSO THOUGHT THAT THIS IS A NICE WAY STUDENTS COULD INTERACT WITH THE "VIRTUAL

EPIDEMIC" TO SEE WHAT KINDS OF FACTORS HAVE AN EFFECT ON INFECTION. SO I MADE A GAME-MODE, WHERE USERS COULD SELECT INITIAL PARAMETERS AND AIM FOR A HIGH SCORE. THE POINT SYSTEM IS SIMPLY, AN UNINFECTED POPULATION X MULTIPLIER, WHERE THE MULTIPLIER IS BASED ON HOW MUCH MONEY THE GOVERNMENT WOULD HAVE TO SPEND TO REALISTICALLY IMPLEMENT THAT FEATURE (THE HIGHER COST, THE LOWER THE MULTIPLIER).

If anyone wants to use this for fun, it'll be fun for a few tries.

Sadly, the simulation can't be sped up too much.

<https://epidemic-simulation.web.app/>

I created a video explaining this over at YouTube:

<https://www.youtube.com/watch?v=lo5r61fqXeo>

If anyone is interested in the code of this project, visit my GitHub page:

<https://github.com/A8Cardinal/epidemic-simulator>

Stay Safe, and make sure to Social Distance.

P.S. This ended up winning 2nd place in the Hackathon and I got a mini-pc from AMD :)

Thank you to my friend who gave me ideas on the color scheme of the user interface!

What is your favorite holiday? Did you think of either Halloween or Christmas? They are two of our favorite holidays indeed. But if you think about it, these holidays wouldn't just have come out of nowhere. Let's find out why and how we came to celebrate these holidays.

Halloween is known as the spookiest night of the year. The term "Halloween" itself first appeared in 1785 in a poem called Halloween by Robert Burns. It contains two root words: "Hallow" and "een." "Hallow" means holy person, referring to the saints celebrated on All Saints Day.<sup>1</sup> All Saints Day (Nov 1) is a Christian feast dedicated to celebrating the departed, including all the saints.<sup>2</sup> "Een" is a contraction of "eve," the day or period immediately preceding an event. In sum, the word "Halloween" means "the night before All Saint's Day."<sup>1</sup>

So, where did the tradition itself originate from? It is said to be Samhain, the Celtic festival of the summer's end celebrated in Ireland, Scotland and the Isle of Man. Samhain is based on Celtic mythology about this world and the afterlife. The mythology states that the border between our world and the other world thins during Samhain, allowing the spirits and the souls of the dead to easily return. In preparation, people made offerings of food in order to get on the "good side" of these spirits.<sup>1</sup> This was the initial idea of Halloween.

But today—as you may have already realized—things are a little different. What about the candies? Or the jack-o-lanterns and the costumes? This is when other cultures come in. For instance, trick-or-treating is a confluence of various cultures including the Ancient Celts, Medieval England, and Medieval Europe (in general). The Ancient Celts dressed up as evil spirits in order to confuse demons, and a similar practice was done in Medieval Europe; people visited neighborhoods

with the disguises on, which is what we are more familiar with. In Medieval England, to be more specific, "soulers" went around begging rich folks for "soul cakes" on Halloween, as they would pray for peoples' souls in return for the cake. All these traditions were combined to be called "souling," and it was brought into the US via the Irish and Scottish immigrants in the 1800s to evolve into the modern "trick-or-treating."<sup>1</sup>

Jack-o-lanterns and pumpkin carving come from an Irish myth about Stingy Jack. He tricked the devil for his own monetary gain—consequently he was sentenced to roam the earth for eternity. In order to frighten away Jack's soul, Irish immigrants of the U.S. started carving jack-o-lantern's from pumpkins, which were native to the region. This custom then got associated with Halloween through Samhain, as it was the day in which people were likely to witness spirits.<sup>2</sup>

Now let's move on to the origin of Christmas. While Halloween is marked as the most ghostly night, Christmas is considered to be one of the most festive and celebratory day of the year. People exchange gifts, listen to carols, decorate trees... There is so much to it. The term "Christmas" is a shortened form of the phrase "Christ's mass."<sup>3</sup> "Christ" comes from the Greek word Khristos, which means "anointed." "Mass" or "masses" is another version for the Latin word "missa," which is the celebration of the Eucharist tradition of eating bread and drinking wine in the memory of Jesus. If you are also wondering why Christmas is sometimes shortened to "Xmas," that

is also due to a Greek root word which is called "Χριστός" which is the origin for the word Christ. The first letter X became an abbreviation for "Christ," hence resulting in the word, "Xmas."<sup>5</sup>

Although the first forms of Christmas were developed from the Pagan festival Saturnalia—a harvest festival that marked the winter solstice (shortest day of the year)<sup>3</sup>—the tradition itself was heavily influenced from the Roman New Year (January 1). On this day, houses were decorated with greenery and lights, and gifts were given to children and the poor. A bountiful supply of food, Yule log and Yule cakes, and fir trees were often associated with this event, similar to how it is in the modern day.<sup>4</sup>

When we think Christmas, there is always one person that we never forget—Santa Claus. It all started from Saint Nicholas, a 4th century Christian saint commemorated in the Eastern and Western Churches. He had a reputation of being very kind and generous, especially towards children.<sup>7</sup> The Dutch transported the legend of this saint to New Amsterdam (today's New York City), along with the familiar traditions of exchanging gifts, sharing sweets, etc. Additionally, the depiction of Santa Claus (red hat and coat, white beard, black belt) was initially created by the famous cartoonist Thomas Nast in 1863, which was mainly based off

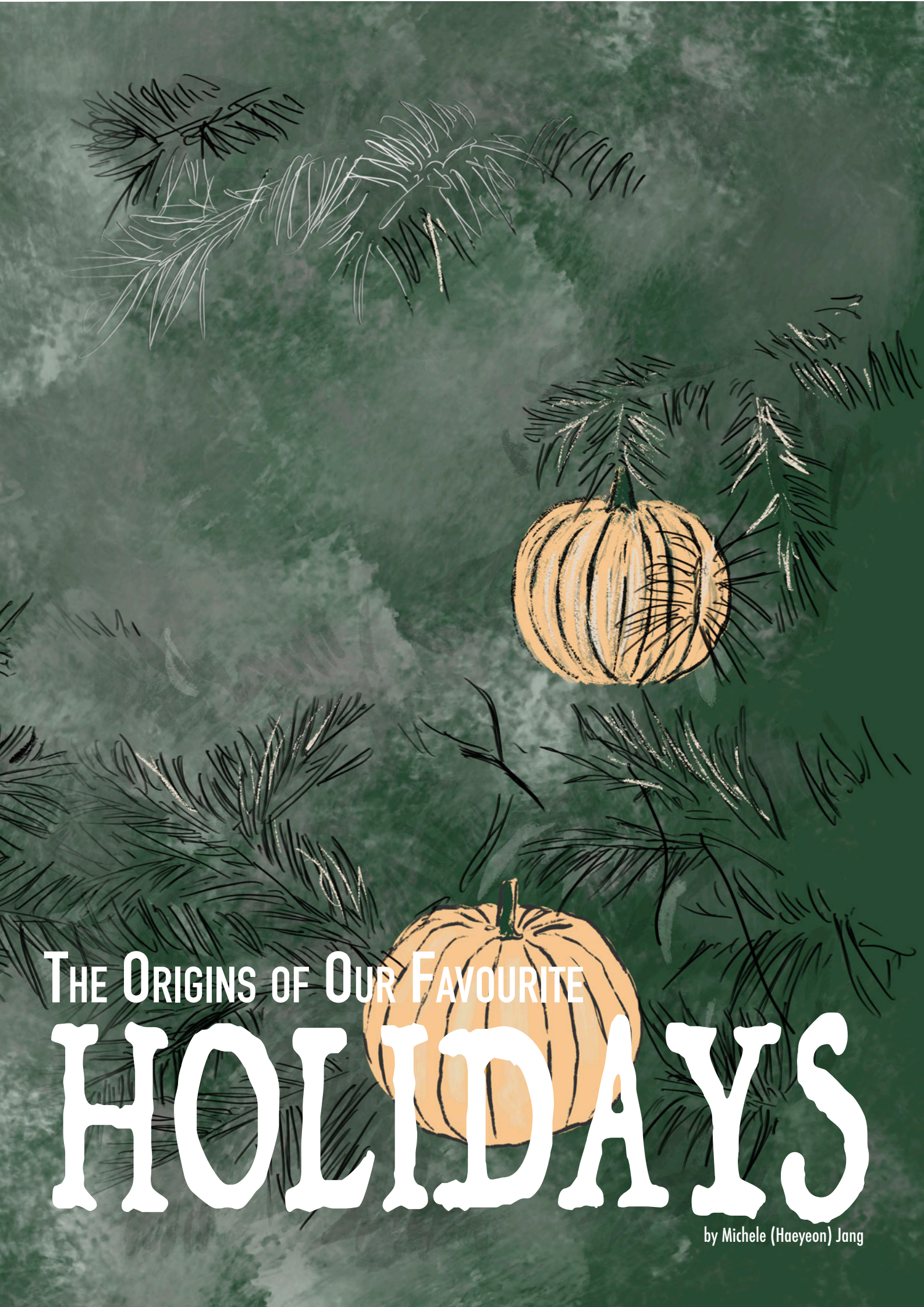
of the description provided in the poem called "A Visit from St. Nicholas."<sup>6</sup> This resulted in the famous Santa Claus that we all once believed in as young children.

With knowledge of the origins of our most

popular holidays, I think that it makes it even more interesting to celebrate them. Although they come back every year, each one of them is always special and significant on its own. I hope you are all thrilled for the upcoming holiday!

## IN ORDER TO FRIGHTEN AWAY JACK'S SOUL, IRISH IMMIGRANTS OF THE U.S. STARTED CARVING JACK-O- LANTERN'S FROM PUMPKINS...

## THE PAGAN FESTIVAL SATURNALIA—A HARVEST FESTIVAL THAT MARKED THE WINTER SOLSTICE... HOUSES WERE DECORATED WITH GREENERY AND LIGHTS, AND GIFTS WERE GIVEN TO CHILDREN AND THE POOR.



THE ORIGINS OF OUR FAVOURITE

# HOLIDAYS

by Michele (Haeyon) Jang



Greetings, everyone, and welcome to my column on Chinese cuisine! Here, I will write about delicious Chinese food, and also provide fascinating insights into Chinese culture and tradition. If you want to find out more about Chinese dishes or simply just want to know about some dishes you can try next time you are in China, then you are in the right spot!

I think many Tango readers may know a little about Chinese food already, but just in case some of you don't, I'd like to start this off by giving you some background information about Chinese food.

The culture surrounding Chinese food has approximately 5000 years of history, from the very beginning, the hunting and gathering stage, all the way through to the modern cuisine we associate with tasty Chinese food. There were all kinds of changes (For instance, wars, dynasty changes, diseases etc.) going on throughout those 5000 years, which immensely affected Chinese food culture.

Okay, here's the thing: I'm not going to walk you through all those complicated changes, because this is a food journal not another history class.

But something I do want Tango readers to be familiar with is that Chinese food has become exceptionally diverse through the course of all these changes. There are in total 8 main different types of Chinese food and each type has its very own symbolic dish and its own home region (the cities where each of the 8 styles originated). But not all dishes in China can even be included in these 8 major categories of cuisine. There are still some special dishes out there that have been invented by a specific region which have their own specialty, not falling under the umbrella of the other 8 styles.

Wow, that's a lot of information! And I think it's probably enough to start you off this

IT'S LIKE  
THE CHINESE  
"ROCK STAR"  
DISH AROUND  
THE WORLD.

# BEIJING Duck



by Xi Gong

journey on discovering delicious Chinese food. So, now let's move on to the dishes, and restore some energy! I hope the rest of this article won't make you hungry and want to fly to China immediately after you finish reading.

Alright, so the Chinese food we are going to start our journey through Chinese cuisine with is Beijing dishes! Beijing, as most of you know, is the capital city of China, hence I think there is no doubt that the food created in this place is both interesting and exquisite. And, for the record, Beijing has so so so many delectable dishes, it will take me forever to walk you through all that. Therefore, to begin with we are just going to focus on one of the most representative and well-known dishes in Beijing, and you maybe would like to get some tissues ready.

So, the first dish in Beijing we are going to take a closer look at is: Beijing duck!

A random reader: Wait, wait, wait! Beijing duck? Are you kidding me? It's such a common dish that almost everyone knows! Can't you provide something a little more original?

Okay, okay, please let me explain the reason why I choose this "obvious dish". First, thank you for your comment, random reader!

Many of you—let's try almost everyone in this world—have heard of this Chinese dish. It's like the Chinese's "rock star" dish around the world. But, ask yourself a question, "Do you know anything else about this dish other than it's a Chinese dish or, ummm, it's made of duck? Do you really know this 'common' dish?"

A random reader: Umm, ahh! It turns out that I really don't know anything else about this dish except it tastes good! I mean really really good!"

Yeah, random reader, Beijing duck definitely tastes good! Next edition of Tango, let's zoom in on this celebrated, world-renowned dish and check out some details about it. Over the next few editions of Tango I will be introducing readers to Beijing duck, and through this, give insight into the culture, tradition, the many flavors of a city I grew up in. A city that I love.

SOIS

## FIRST OPPORTUNITY

Last year in May, I had a valuable experience participating in a virtual slum tour to acknowledge the living conditions in some cities of Kenya. When the viewers had an opportunity to communicate with a girl from Kenya, I asked if she had any wishes and her answer was to buy a smartphone. Her desire to have a smartphone was based on her dreams to interact with technology and become an engineer in the future. This was vastly fascinating and has inspired me to organize a similar event online for SOIS.

## WORKING WITH THE CHILD DOCTOR ORGANIZATION

As part of the fund-raising initiatives designed to support 'Child Doctor Japan', I created hand-made beaded bracelets with my friends and sold them near the cafeteria every Friday. The main purpose of this project was to support Child Doctor and bring awareness of the reality of poverty/limited access to healthcare in the slums of Kenya. In the end, all sales from selling the bracelets were donated to support the work of Child Doctor, as well as to purchase necessary goods for families and cover the costs for emergency surgeries for children.

## VIRTUAL SLUM TOUR (OVERVIEW)

The tour was held in two different languages (Japanese and English) since I wanted the whole SOIS community to equally have an opportunity to experience the interaction with Kenya.

We had an interview with a 14-year-old girl named Grace (whom Child Doctor supports) for the first half of the online tour. She introduced her culture, described daily life in Kenya, and answered some of our questions with friendliness, while I spoke as a moderator. Afterward, we had Catherine, a Child Doctor staff member in Kenya, as a guide to take us through the area where Grace lives (Southland slum in Nairobi). I believe it was a rare and meaningful opportunity for all of us, as it was not a recorded video from the past but a live event where we saw in real-time how people were going about their daily lives.

## MESSAGE

While the main goal of this Child Doctor project was to support children living in the slums, I also hoped to paint a broader picture of their life in Kenya. What we generally see about Africa in the news media are the stories that often only portray how poor or tragic their circumstances are. However, as an international community, I believe it is truly important to recognize our common humanity and become aware of such harmful stereotypes against these communities. Just as we saw through the slum tour, there is a life there that is just as nuanced and colorful as ours here in Japan; I'm sure many of us remember the smiles of people and that moment when Grace told us about her dream of becoming a doctor. Even though many challenges and hardships remain, poverty does not define a person's life or happiness.

**THE VIRTUAL SLUM TOUR**  
**CONNECTING SOIS WITH KENYA**  
**OR...HOW A STUDENT MADE A DIFFERENCE**  
Tamami Ono (OIS 11-grade)

# “The Most Beautiful Equation in Mathematics”

By Tadayoshi Kamegai

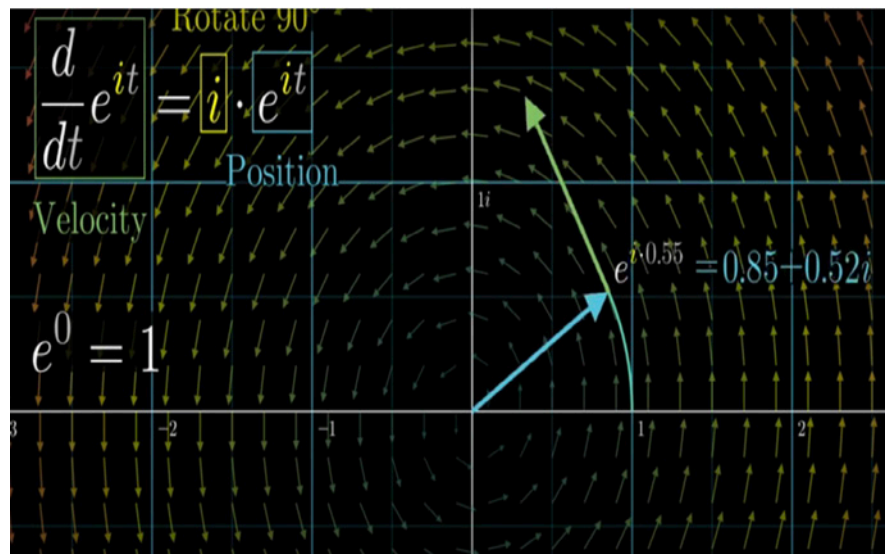
A Quick Visual Approach to  $e^{i\pi} = -1$ : “The Most Beautiful Equation in Mathematics” (and deriving De Moivre’s Theorem from that).

$e^{i\pi} = -1$ , is known as the most beautiful equation in mathematics (though I believe this statement shouldn’t be commonly used). This is one of the most famous identities by Euler. In this short article, I will attempt to explain how to visually interpret this identity, for those that may be interested in how it works.

A quick disclaimer; this article will require the knowledge of  $i$  (imaginary number), and a little bit about calculus.

To begin, we need to understand what exponentiating a number by an imaginary constant truly means. Instead of the equation,  $e^{i\pi}$ , let’s start with an equation

perpendicular and in equal magnitude to the function, it will draw out a circular path with a fixed radius. And, recall that  $e^0 = 1$ , so that radius is equal to 1.



with a variable,  $e^{i\theta}$ . For instance, if we set  $\theta$  to 0, we end up with  $e^0 = 1$ .

Now let’s think about how this value changes as we change  $\theta$ . In other words, for a small change in  $\theta$ , how does the value of  $e^{i\theta}$  change? There is actually a very useful tool when trying to figure this question out. Discovered (or some may consider it as invented) by Issac Newton, the concept of calculus can be used. The derivative is a tool that we can use when trying to find how the value of an equation changes with respect to a small change in a variable of that equation. Let’s do that with our equation. The derivative of  $e^{i\theta}$  with respect to  $\theta$  is equal to  $ie^{i\theta}$ . In other words, for a small change of  $\theta$  in the equation  $e^{i\theta}$ , we move on the coordinate plane (with a real and imaginary axis) by  $ie^{i\theta} d\theta$ . For instance, when  $\theta=0$ , we can expect a small change in  $\theta$  to change the coordinate by  $ie^0 d\theta = i d\theta$ .

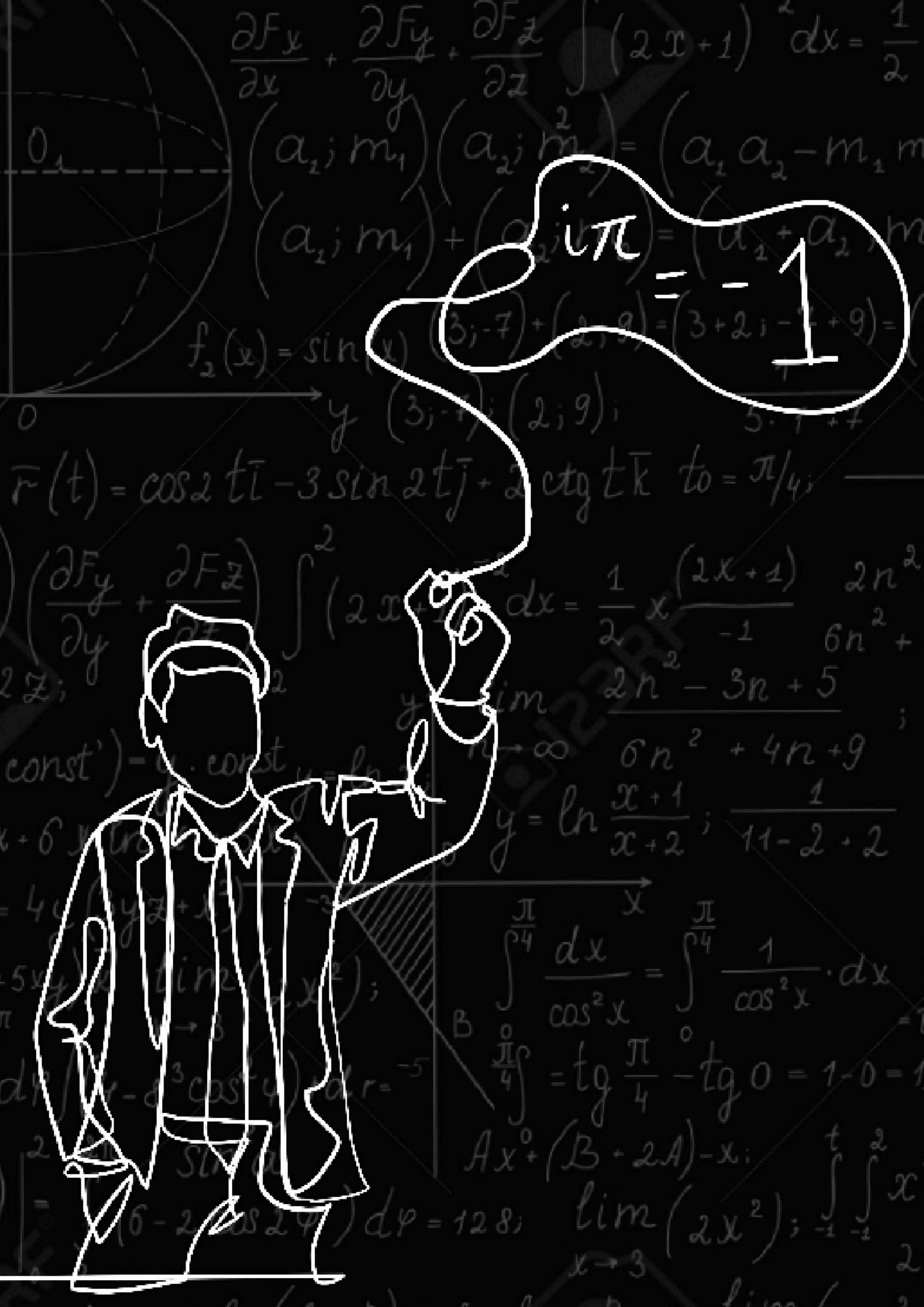
To see this visually, imagine a coordinate system with real and imaginary axes. For any value of  $e^{i\theta}$ , we have a vector (or a movement) along a line, whose value is the position vector of  $e^{i\theta}$  rotated by 90 degrees (or multiplied by  $i$ ). The image below attempts to show what we mean.

Now, we can actually see that because the vector of this function is always

Finally, consider that we let this circular path draw out for  $\theta = \pi$ , that is, half a revolution. Then, we would end up with a point on the other end of the real line, or at  $0 - 1 = -1$ . So, it is clear that  $e^{i\pi} = -1$ .

But with this method, we can actually expand our understanding further, to any value of  $\theta$ , simply because the position of the value with respect to  $\theta$  can be represented by trigonometry. Though this is a less rigorous statement, it is clear that for any value of  $\theta$ ,  $e^{i\theta} = \cos\theta + i\sin\theta$ . If we let  $\theta = \pi$  again, we end up with  $-1$ , showing this is consistent with what we have found so far. Let’s try replacing  $\theta$  with  $n\theta$ , because a similar logic applies (You can try this yourself). If we replace the values, we end up with,  $e^{in\theta} = \cos(n\theta) + i\sin(n\theta)$ . But if you rearrange this original equation slightly, we get,  $e^{in\theta} = (e^{i\theta})^n$ , which is clearly equal to  $(\cos\theta + i\sin\theta)^n = \cos(n\theta) + i\sin(n\theta)$ . This identity is known as De Moivre’s Theorem, and this is a way to show that this identity can be applied for any value of  $n$ , regardless of whether  $n$  is an integer or not.

Just as a quick note, if you are planning to take DP math in AA HL, this is an idea you will go over, so it’s something interesting to keep in mind when imagining where it (sort of) comes from.



$$e^{i\pi} = -1$$

$$\frac{\partial F_x}{\partial x} + \frac{\partial F_y}{\partial y} + \frac{\partial F_z}{\partial z} \int (2x+1)^2 dx = \frac{1}{2}$$

$$(a_1; m_1)(a_2; m_2) = (a_1 a_2 - m_1 m_2)$$

$$(a_1; m_1) + (a_2; m_2) = (a_1 + a_2, m_1 + m_2)$$

$$f_2(x) = \sin(x) \quad (3; -7) + (2; 9) = (3+2, -7+9) = (5; 2)$$

$$\vec{r}(t) = \cos 2t \vec{i} - 3 \sin 2t \vec{j} + 2 \cot t \vec{k} \quad t_0 = \pi/4$$

$$\left( \frac{\partial F_y}{\partial y} + \frac{\partial F_z}{\partial z} \right) \int (2x+1)^2 dx = \frac{1}{2} x \frac{(2x+1)^2}{-1} = \frac{1}{2} x (2x+1)^2$$

$$y = \ln \frac{x+1}{x+2}; \quad \frac{6n^2 + 4n + 9}{11 - 2 \cdot 2}$$

$$\int_{\pi/4}^{\pi/2} \frac{dx}{\cos^2 x} = \int_{\pi/4}^{\pi/2} \frac{1}{\cos^2 x} \cdot dx$$

$$\lim_{x \rightarrow 3} (2x^2); \quad \int_{-1}^1 \int_{-1}^1 x$$

# UNIVERSAL HEALTH CARE AND...

## WHY YOU NEED TO CARE

Imagine you live in the US, and a family member has recently gotten Covid-19. You get a call from the hospital,

**"The patient is in critical condition."**

**"We will be moving them to the ICU for further treatment, please agree to the terms so that we can proceed with the treatment. You will be asked to make a payment for the treatment times and the number of days the patient is in the ICU or regular ward."**

Regardless of your financial situation, you and your family will do everything in your power to get them the treatment they need.

They end up being hospitalized for a period of 21 days.

Your family is charged for 21 days worth of treatment, and hospitalization.

**Total amount: \$300,000**

**No, that's not a typo.**

CNN<sup>1</sup> reported that on the average, a covid patient in the US who is hospitalized and treated in the ICU as well as requiring respirators, has spent more than \$300,000. In

yen, that is approximately 30000000 yen, or 3300万円(man yen).

Now, consider this: You live in Japan instead of the US, and the exact same scenario happens. The only difference is the country you live in. How much do you think the total cost will change?

On the average, a covid patient in Japan who is hospitalized and treated in the ICU as well as requiring respirators, owes around ¥2,000,000, which is approximately \$20,000 US. However, 70% of this is paid for by health insurance, so the total amount is actually ¥600,000, or \$6000. But hold on, in this scenario, the patient required treatment in the ICU which, in terms of payment, comes under the category of "高額療養費"<sup>2</sup>, which in English translates to, "High Cost Medical Expenses". With the system implemented in Japan, health insurance covers 70% of the 30% that you owe. Meaning that after subtracting everything that the health insurance companies have covered, you would owe a bit less than ¥100000, or \$1000.<sup>3</sup>

How could the total cost be this different? The only change in this scenario is the country in which you live, right?

The answer? Universal Health Care

Universal Health Care is a health care system in which all residents of a particular country or region are assured access to health care.

In countries like Japan, having health insurance (The Japanese healthcare system) covers the majority of your medical bills. However, in the US, people do not have universal health care. Therefore their medical bills tend to total to an amount that the average household cannot afford.

So if you currently live in a country where Universal Health Care isn't provided, for example the US, and someone in your

*by Tanishka Murthy*



family goes through the scenario above, you would owe a tremendous amount of money.

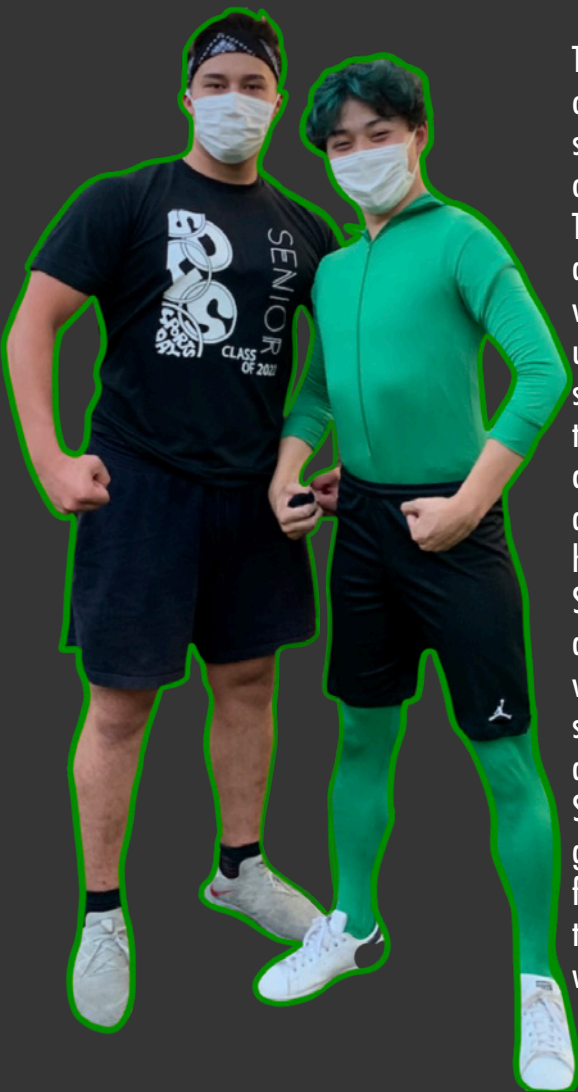
You may be thinking, in a situation like that, money is the last thing people would be thinking about, and you're right. Most people probably won't be thinking about the money that they will owe. However, if you live in a low income household and are already doing everything possible to minimize costs of living, it will matter. It does matter where you live, and it does matter that even some developed nations don't have free or universal healthcare. I'm not here to criticize the policies of a specific nation. However, in this day and age, when the 2030 deadline for the SDGs are fast approaching, honestly, regardless of what a nation deems is their priority, when it comes to protecting their citizens, every single person should have access to healthcare. Because without our health, we basically have nothing.

CNN<sup>1</sup> reported that on the average, a covid patient in the US who is hospitalized and treated in the ICU as well as requiring respirators, has spent more than \$300,000. In yen, that is approximately 30000000 yen.



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This year's annual SOIS Sports Day was one to remember. Year after year, many students articulate that sports day is one of their top highlights of the year. Thus, not being able to dedicate a whole day towards this event last year was very unfortunate, although completely understandable considering the COVID situation at the time. Fortunately, with the efforts of the high school student council and the school administrators, as seniors this year, we were able to have our final sports day. After being at SOIS for 13 years, having one last sports day—after not having one in 2020—was very important to me and many other students who have been at the school for a considerable time.

Several changes came with the new guidelines that the committees had to follow to be able to move forward with this event. One of the biggest changes was just the size of the event. Sadly,

unlike previous years, the middle and high school events were completely separated and parents could not attend. With SOIS being such a small school, sports day had been one of the few occasions that students of all grades were able to interact with each other, meaning that this time a crucial aspect of the event was taken away. However, the benefit of this was that each student was able to fully participate in all events and help to cheer others on without feeling left out, which can easily be felt in such crowded spaces.

Another big change was the cancellation of the performance event. The performance had been one of the main events that used to be most competitive. This is because naturally, with the other events, like the relays and tug of war, the upperclassmen have had a better chance of attaining higher scores but performances have

# SPORTS DAY 2021

by Janet Jones



## TANGO

always been scored purely on creativity and class unity. Meaning that each grade had an equal chance of winning. Hence, the tension between grades for the performance event was always high. Many students had strong opinions on the matter of the cancellation of this event for this year's sports day. However, with this came the implementation of multiple new events, like Tetris, SOIS quiz and charades. This allowed many students to feel more comfortable and included because of the wider variety of choices in the types of events.

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The theme was, "Olympics", and so each grade in high school was allocated the color of one of the Olympic Rings. Hence, the 9th grade was red, 10th grade was yellow, 11th grade was green and 12th grade was black. Alongside the themes each year students of all grades often go all out with their outfits for this special day. Some of the most outstanding results were seen by the 10th grade where they were able to beat the 11th grade with their overall score. Not only this but for both the girls and Swedish relay, the 10th graders

came in first. As one of the highlights of the entire day, this was an outstanding job by the sophomore year.

As cheesy as this may sound, personally, one of my highlights of the day was simply being able to spend the day cheering each other on alongside my peers and some of my closest friends. On behalf of the 12th grade—the champions this year—after not having any major school events for several months, I would say that the majority of students had a wonderful day. Having started off as a kindergartener back in 2008 at my first sports day, my 13th and final sports day at SOIS was a day to remember. It was a day that will be etched into my memories of SOIS for many, many years to come.



## RESULTS

### Girls Relay

1st: 10th  
2nd: 9th  
3rd: 12th  
4th: 9th

### Boys Relay

1st: 12th  
2nd: 11th  
3rd: 10th  
4th: 9th

### Swedish Relay

1st: 10th  
2nd: 9th  
3rd: 11th  
4th: 12th



GET APPY: Check out these altruistic apps. Phospho, a 99-cent flashlight app, gives its entire sticker price to Sight Savers International, the Himalayan Cataract Project, and Vilamit Anjals to fight global blindness. Snooze, an alarm app, charges you 20 cents a day because it's the cause of so much trouble.

IS LOOKING FOR CONTRIBUTORS

We would love to hear from you if you are interested in writing, drawing or taking photos for this SOIS student magazine. If you would like to take part in any of these ways, please talk to Rena Kawasaki, or Mr. Algje about how you could help.

*Writers*

*Illustrators*

*Photographers*

*Copy Editors*

JOURNAL