1 Weverton: Okay, so today we're going to do something that I call life story interview. So we're going to try to call back from your elementary school until now. I will be asking questions about your relationship with your family and everything, trying to build your whole story. So can you tell me about your elementary school math experience that you remember?

2 Jennifer: um, Very, it was very easy, very basic. As I mentioned, I went to like a liberal arts focus school. So it was not really they weren't emphasizing science and math a lot. So it's pretty easy to handle. for everyone. I don't remember a single traumatic experience. Coming from math. It was more the writing I think I struggled more in like being able to write letters when I was like really, really? Not so much. Just the numbers, so

3 Weverton: And what was the best thing about your elementary school experience?

4 Jennifer: I think they gave us a lot of opportunities to be creative. And I think that was really good experience altogether so yeah, they they gave us time to you know, there was a lot of know you could draw take part in competitions, a lot of art. There was a lot of writing as well you know, poetry competitions and stuff like that reading competitions. So I think they really gave us like a really nice he now competitive but also really like cool environment and I feel like I really enjoyed it a lot like I have really good memories of all those all those experiences,

5 Weverton: Can you talk a little bit more about these competitive aspects?

6 Jennifer: So they will usually, you know, in the school year, they would maybe have one drawing competition. And what they would do is be like, I was really into art and drawing when I was younger. So what we would do is we would scatch together one afternoon and they would kind of organize us in the classroom and give us all our utensils, and then we have like maybe two or three hours to kind of work. And then you know, the, like, the pictures or whatever we have managed to do. It was pretty free so you can make like a sculpture anything you want it and then they will be exhibited. And then somebody would like vote on them and you know, you get your little prize. So it was just like another Together, you know, friendly. And it was from kids from like, all all of our school. So it wasn't like a very, you know, close. You know, there was no there was no rivalry or anything like that.

7 Weverton: I see. And can you tell me what was the worst thing about your elementary school experience that relates to math? if you can remember anything.

8 Jennifer: I just think the lack of emphasis and just teaching us everything like it was an algorithm. So there was no, they never motivated it the correct way that teachers were not prepared to nurture, thought, curiosity in mathematics and sciences, supposedly mathematics is very, very hard to you know, get a child thinking about it. And I just feel that there was a complete lack of interest and lack of emphasis on it.

9 Weverton: Nice. And were you identifying as being an early achiever in math?

10 Jennifer: I think in everything, it was just I had to get the best that I could in every topic. It wasn't so much math, but I mean, it was part of it. So I worked as hard as I could and got the best scores that I could.

11 Weverton: Was that something that was coming from you or you're being pushed by parents or?

12 Jennifer: I'm the eldest. So I feel like I always have that extra responsibility. And my folks always told us I don't I don't remember them being like super focused on the grades so much as Are you understanding, are you able to do it and of course the grades are going to be a reflection of that. So I recall them telling me you have to be the best. Like that's all I remember from when I was kind of like Well, you're you know, if you're not the best, like what's going on? Do you need something else? Can we help you in some way like you need a tutor and I do remember like them getting tutors for me at some point when I needed an extra push

13 Weverton: Okay, and how did you overcome any negative experience in mathematics in elementary or middle school?

14 Jennifer: I remember I had a really bad with in middle school not so much in elementary and elementary It was like, super simple stuff. But I remember middle school we had a really bad teacher actually just enjoy humiliating people in front of like the entire classroom. So if you made a mistake in math, she was just like, call you out. And in that was not like constructive criticism. So it wasn't like, Oh, you know, no, it's this way. It would be like, Oh, how what is wrong with you? or How could you think about you're lazy or you didn't study, you know, like, very personal attacks, and I remember she called me mechanic once. Like, kind of like, you're just doing things, you know, like a robot, like you're not thinking about them. And I remember I thinking, oh my god, like, I'm gonna, like, get so much better at this and I just want to kinda Know show her how wrong she is. But yeah, I was pretty early in middle school. It's funny that I did end up, you know, just kind of working in mathematics. But at that point, it was like, one day because I really dislike that Professor. But yeah, that was bad, but it was just, you know, I mean, she did to everybody. So I just remember being as angry and as outraged as pretty much everyone was in the class because we just everyone this lecture because everyone disliked her.

15 Weverton: I see. So I think that's a very negative impression. Can You give me some positive impression of some of your math teacher in elementary or middle school?

16 Jennifer: Um, So yeah, middle school. I remember, in the last year, I had a really good teacher. And she I remember her teaching us logarithms. And I remember that she actually, you know, tried to get us to think, you know, she was not You know, prepare to teach mathematics. Exactly. It was really just gave her that topic and she was doing the best she could, but I really appreciate the effort. She tried to motivate logarithms in the best way, you know, she had come up with, so I enjoy it, you know, she would encourage us for the first time, you know, in our lives to go to office hours, which was a very different, you know, usually ask questions in class. And I think in office hours, you could actually ask those questions that you would be embarrassed to ask in class. So I think that kind of fostered a closer communication. I had, I remember having a really good experiences to be able to discuss things.

17 Weverton: Nice. And let's talk a little bit about your experiences at home. So you talked a little bit like that your, maybe your parents or guardians, they would give you whatever support you needed. So I have some specific question. So, what did your parents tell you about math in the expectations of your succeding in this field?

18 Jennifer: Um, I remember that. At some point, they're they're trying to kind of remind me, you know, you need to understand math it's gonna be important, every single subject. Maybe what I have maybe was complaining, you know, but I didn't like it. Yeah, I think at some point to highlight low ish score like I dropped down to like a b minus or a C or something like that, in my report card, and I think they're really, you know, it's important. I think they mentioned something like, you know, I didn't like it. And I went to biology and I still had to learn calculus. So I think they're just kind of trying to make me feel better. So yeah, I remember they were trying to emphasize that it was important and then when I actually studied mathematics, they were, my father especially, I think he was like really jeaulous, he was like oh my god, I wish I had realized, you know, because he found it fascinating when he you know when I told them like what it was about so they, they really really like it

19 Weverton: Nice, and is there any other way you think they influenced in your school success?

20 Jennifer: I mean yes, my parents were very active and involved and all their kids were a big family it's four kids so they had to be asset, you know, they try to be as hands on as possible, because there was a lot you know, there's too many of us. But they, I mean, definitely from like buying supplies at midnight because I forgot to tell them you know, that the next day I needed play though or something, you know, to doing the school like those bake bake offs or whatever the

mothers have to do to raise funds. I remember my parents just always being there for everything.

21 Weverton: So, did your parents or other close family and friends have careers or exposure to math?

22 Jennifer: Yeah, yeah my my folks lately in the past five years their area has become really they have kind of switched topics and it's they use a lot of statistics a lot of stuff that even I don't know what they're doing. So it's more like they apply you know, these programs or software that uses all these models that I am able to understand but you know, I don't particularly like involved or working with so yes, they definitely use even in a tangential way or their have their students do

23 Weverton: do you think that influenced you from an early age?

24 Jennifer: I think in an early age, they were not you know, they did not use math. They their career has The shift that might make folks are researchers so they change topics every at six or seven years after you know funds run dry in an area then they switch so they were doing very like just description of you know taxonomy more of bugs and stuff like that when I was young so I did remember a lot of bugs for instance. I remember them eally connecting mathematics to it.

25 Weverton: You referring to your parents as folks is there right? [Jennifer: Yes] oh, interesting, is there any particular reason why? I am curious.

26 Jennifer: We're just good friends I mean, we're really good friends I think finally at that age you know, are there isn't that controlling you know, are they dictate, or necessarily judgment coming from them as more like they're just cool people that I have like, a few things in common, you know, because of our areas because I like the personalities, and I can just kind Look, you know,

27 Weverton: Nice, okay high school can you tell me about your experiences in mathematics during high school?

28 Jennifer: um, during high school I remember being very confused. I think things weren't very they did not approach it in the right way. I didn't have the pre calc preparation they try to give us a pre-cal prep but the teachers were not. There was like one teacher in particular and he was absolutely terrible and he taught us into like financial mathematics. And I just remember just protesting all the time, not about the topic but about the way he handled the class. He He did not know how to handle a class though. I mean, we were routier. We were teenagers, we were not, you know, easy to handle. And I remember just he just, you know, complaining that he wasn't. We didn't understand that he needed to repeat it and that was. There was no way you know, that that was the right way to explain it to us because we did not get it. So I just remember complaining and trying to get the score that I needed because you needed to pass the exams to graduate. I just do not remember having a good experience. It was a lot of memorizing a lot of being really confused.

29 Weverton: So what was the best thing about your high school math experience?

30 Jennifer: I think that they did not since they did such a bad job of teaching us. We were almost like a blank slate. So when I went to, because I after that, when I went to college, I went in Ecuador, so we had a six, they knew how bad the education was, you know, the college, I went to look up polytechnics so they knew how bad it was. So what they did is they would do six months to bring everyone up to speed. So in that sense, it was great that I hadn't been confused that I didn't have that habits, you know, mathematically speaking that you know, I had confused concepts or a lot of the kids come with a very wrong, you know information like they they actually taught them wrong. And then they it just really sabotages their you know, college experience so I think for me I didn't know anything. It's for me like they just talked and I was like, Okay, this is all new and process I process things the right way. And I did kind of

31 Weverton: So in what ways have you been encouraged to excel in math in high school?

32 Jennifer: It was a very grade driven kind of high school experience. Everyone's very competitive when it comes to grades because you wanted to make the bowl valedictorian and you wanted to make the top 10 because it did matter to the you know, when you when it came to college admissions, so so much math centered, so much as if you did not Excel and absolutely everything you were not going to make The top group and I was trying to make it. I did not, but I tried, I was just trying to understand as much as I could, you know, try to improve on everything as much as I could.

33 Weverton: So, you mentioned you grew up in Ecuador. So can you tell me like is this context of going to college, all these related to Ecuador or the US? [Jennifer: I mean Ecuador? Yeah, because I went to college in Ecuador as well] Okay I got it. cool. And did anyone ever discourage you from pursuing math in high school?

34 Jennifer: Um, I think somebody made a comment or something. I think it was a teacher but but it wasn't something particularly you know, directed to me it was something like you know, you've never excelled at this topic. How come now you want to do this, you know? Because especially because I excelled in writing, I had a good track record on that. And just everyone was really confused that I had chosen mathematics. So it was discouragement in that sense, you've never really did good. It's a tough subject. How come now you're going there?

35 Weverton: Interesting. College. Can you tell me about your experiences being a mathematics student in college?

36 Jennifer: um, I enjoyed my math experience in college, it was very hard. Um, the topics were a little bit out of all the [inaudible: growds]. I think just because the level I mean, just like in Brazil, I think we have the same system. It's, it's very a lot of material very fast and you don't have enough time to processing. And there were the people in the math. It was very few of us. So those classrooms are seemingly small. So you felt the spotlight on you at all times. You could not kind of fly under the radar. I mean, our call class was the biggest and it was like 25 people. And then you broke off into smaller classes that were, you know, eight people 10 people the most. So the professors need it really, really well. And I don't think they taught their topics particularly well. They just went really fast. They didn't realize, you know, these kids. Also the, it was not well designed, we started with, we didn't go gradually, you know, a theoretical it was theoretical mathematics from the beginning, very abstract. So if somebody teaches you a limit with the definition of limit from day one, you were going to have a problem, you haven't even seen it in action, and there's a bunch of words and suddenly someone's asked you to prove something. You've never done proof in your life, but that that was calc. one for me. So I think in that sense, they kind of like threw me in the deep end of the pool. It was just, it was beautiful was like looking at something that was beautiful. You could admire the beauty in it. But also that you could not really take part in it and do it because you were confused and lost. But I had a great calc. teacher. so

37 Weverton: Nice. So did like, like you mention about being on the spot, like there was no way out, did that bother you?

38 Jennifer: It bothered me in the sense that if you made mistakes, everyone knew the mistakes that you made. But then again, you know, it was, it was also an opportunity to, you know, keep yourself in check and not slack off because it was really easy to you know, we had so many topics it was it was I just remember it being a whirlwind because I did half of my undergrad in Ecuador and then I transferred To the US. So those two and a half years that I was there, it was so crazy. But the spotlight yeah, I remember, I mean, I think, I think some kids made fun of, you know, I mean, we were roughing each other sometimes. But they it was all guys I think mostly, and guys are not they don't really, I don't feel like they were cruel to each other or to like, you know, like the few girls that were there. I don't remember them. I mean, they were also very careful. You know,

they just didn't want to come across as bad people. So they probably were thinking, no, God, how did they say that? Or how does she say that? But they didn't say so. They were pretty tame. I never felt you know, like my classmates were judging me the professor for sure. But I'm like, my classes were more like, you know, she's our friend. She messed up. That's it.

39 Weverton: I see. All right. Why you describe Like those two and a half years in Ecuador as crazy?

40 Jennifer: It was crazy. I mean, I just remember so many classes, everything I mean, we have like double the credit hours that we have here. It's just the structure is different very European kind of type classes. So we will be taking maybe five classes a semester and that was like entirely too much. So yeah, I remember it just being you know, overwhelmed with everything and barely managing to cope the homework, there was a lot of homework. I mean, even if it was it was it was probably reasonable class to class but if you have five classes, seven are taking like set theory in my first semester, calc. one, linear algebra one. And then there was a physics one, and there was like one elective like something random, like I don't know, writing or something. So it was a lot

41 Weverton: And was a particular reason why you transfered ?
42 Jennifer: um, I was, So the school was great. I mean, my classmates, you know, the the kids that I started, you know, college with now are and you know, PhD programs all over Europe in the US. So it was an amazing program , but, and I wanted to continue, but my sister entered the Polytechnic as well. And she wanted to pursue pure chemistry, like just pure chemistry not into not engineering centered, which was the only thing available in Ecuador in that university, which was like the best one. So my parents just kind of grab both of us. She kept saying, you know, I want to go to the States I wanna go to the States and they said, you know, if you both you agree on wanting to go then we can you know, that we can set something up and we can help you guys. But we can't just send one person because like they said, it's just too risky, emotional, you're going to be alone and it is just the rent is going to be a lot, you're not going to be splitting with anyone and there was just like and also tuition. So my parents kind of and also my sister, so we kind of talked it over. And we decided that even if it was a good program, I mean the program and the we went to the University of Florida, like it's not a bad program it’s really good university and also the opportunities they kind of like mentioned, you know, you can get a scholarship, you can do research that in Ecuador, that was just not a possibility. At the time, you know, undergraduate research was non existent. So, that persuaded me to kind of just start looking for and so that's, that's why I transfer we both transferred.

43 Weverton: Nice. All right. So let's talk a little bit about yourself, and your Math confidence. So if you were about to rank yourself from one to 10, about being confident, how would you rank yourself in elementary, middle school, high school, college and on your PhD?

44 Jennifer: Um, I think elementary school is probably like an eight or nine. Yeah, I was very confident. I think because you don't know what you don't know, you can do anything. So I was pretty confident. I think in middle school was probably like a six. I was not confident at all. And High School also like maybe a seven and improved a little bit because I could do a little bit more things. And in college, I think it was also about like, a six. I was just trying to trying to get you know, a hold of it. By the time I finished college, I become like much, much more confident. So I would easily say that by the time I finished my bachelor's, it was like a good eight. Again. When I finished UF, it was I had taken so many grad classes and I had had such a good experience and I just as much as I struggled, I was getting the I was getting like good grades, you know, I had like a perfect record. So you can see, you know, the reflection in my professors. I had a great relationship we could be communicating, you know, they trusted me, you know, they believed in what I was able to do, and I think that's a huge part. in grad school, I would say it's also like a seven I get dropped off definitely, it's tougher. But I think the difference now is that you know, I'm so much older, you know, then I was when I was younger, and after so many years of being In the field you realize that you just need time to figure things out. It's not a matter of how much you know how much talent you can bring to the table you know, given enough time I feel like could do

anything. So in that sense it's the confidence was like okay Just give me a while figure it out and I will get things done.

45 Weverton: Nice, and do you feel comfortable asking or answering questions in mathematics classroom?

46 Jennifer: Asking yes answering not so much. I asked a lot of questions. I do not enjoy when Professor single you out to answer question but I usually take a step at it. But I have been in classrooms where they do that. I think it works great. I read the material beforehand much more thoroughly. When I know the professor's when those guys just turns around when you tell me where this is like, Well, you know, I'm late. I'm glad I read it. So it works for me.

47 Weverton: And is there any particular reason why you feel comfortable in asking questions?

48 Jennifer: I mean, asking. Yeah, I don't know. Just. Yeah, I feel like just expressing what you don't understand or asking someone to clarify something or ever you been the surface. And it's like, Can you repeat what you just said? Because I didn't know it didn't sink in, just say it again. You know, like, I don't care. I don't mind expressing that. I don't know, but or that I rather I have no issue wanting to know more than expressing the desire to know more. I do you have an issue with kind of revealing that I don't understand something that I probably should, you know in that sence.

49 Weverton: Nice. Let's switch gears. So, I'm going to be asking you some questions about gender now. And pretty much is about your experiences as being the person that you identify with, your Gender in these spaces. So and I am going to give you a little bit of my background like what I think about it, so pretty much for me gender is a socially constructed aspect that describes the way normative sexes should be formed in society. That's the way I see it. So for me, pretty much the way we created it was following a norm for the male and the female sexes. And then we created things that we believe is a category for what we describe man and a category for what we describe women. So that's the way I see it. But I am a little bit curious how Let me see the best question to ask this. Yeah, so can you tell me about your understanding of gender in the context of the US or the Ecuador society you can go either way.

50 Jennifer: So I had a very different, you know, idea of what gender was up until I took a gender and sexuality class in my undergrad, which I think was probably the most informative class when it came to just living in a society that is wrapped that was at that point, you know, rapidly changing, because this was back in 2011 and 2010 something like that. And all those changes have happened, you know, in the last few years. So it was at that cusp, when all these ideas were being trying to you know, they were trying to normalize it, they were trying to spread it. So, I have a great teacher. And that's where I learned, you know, how gender in the US specially You know, they're trying to get people to understand that, you know, it's not a binary thing. And I remember our teacher just gave us like a test like a little test, you know that where you would answer some questions and they would give you your gender in like a great like a grayscale. It was like male, female, and there was like all these like different, you know, tones of gray in the middle. And I think that was the moment that for me that made sense. The way that they see it and Ecuador is very binary well now it's not even binaries, like split into three pretty much it's like, male female and then like either any person that identifies as LGBTQI, you know, it's just kind of like that something else. Whatever you're in there, you know, like, it's fine, you know, we're a big young people, you know, nobody, nobody that I've known personally has had an issue or has ever expressed any sort of discomfort. But I like that in the United States. They are trying to spread at least in those classes, you know, that idea of fluidity. It just makes everyone feel so much better.

51 Weverton: Nice and what does your gender mean to you?

52 Jennifer: Um [thinking] I guess, just. It's a part of my identity, just kind of, i don't know however, like I've never given it much thought, but I guess it means. Yeah, it was just, you know, part of who I am. I do think that I, you know, enjoy fitting in a specific, you know, category. Even, you

know, even if it doesn't, you know, you don't adhere to you know, every maybe every single norm you know, for a woman or something, but it's nice to have that kind of like that. Those few guidelines that you can take from the very cliche or kind of normative view of a woman and you know some of those you like and you adopt and I think that in that sense feel that it's nice to have a grip to belong to all of those you know.

53 Weverton: Nice and how do you feel when talking about gender with people you don't know very well?

54 Jennifer: um, Yeah how those conversations they usually it's the older folks and usually they complain about being confused about it and having to subtly tiptoe around you know, not being able to give somebody the pronouns that they got first pop in their heads, and you know, about not being able to give somebody the pronouns that just pops in their heads, and you know having to actually ask, you know, what do you want me to call you? which I don't know what really they make a fuss about but you can def I mean, I've had conversations in conferences, where you go to like some old professors. And they are like ohh young people these days? You know, like, I have to, like ask them, you know, you know, girl comes into my lab, do I have to ask her do you wanna me to call you, you know, she can do you go by that pronoun, they're like, yeah, suddenly, you know, you can just, you know, your head is telling you it's a she. But you have to ask them and you know, they complain about that. So I've had this conversation and all you can do is stare at them and be like, I understand. Yeah, no, it wasn't like that in the past, you know, so it does not feel comfortable with people that you because those are the only people have bring up gender. Honestly, like it's not, you know, the non binary kids. You know, you can tell you know, they don't bring up gender, usually people who have an issue with it. So that's the only conversation that I've had to deal with.

55 Weverton: What does it mean to you to be a woman, that question is interesting. So what does it mean for you to be a woman in the US society?

56 Jennifer: [thinking] Well, I do. I have been lucky that since I've always been in a university environment, you don't feel the difference between genders yet. You know, I, our salaries are, you know, they're public, they tell us you know how much so in that sense you don't feel that discrimination that statistically it's there somewhere. Also very well there's a few kids that you know, have have kids with their own. But you know, there is like maternity leave, you know, mandatory both for male and female. So you still feel kind of like you're in the same level, you don't feel different because you're a woman. You know, you may be dressed a little bit more feminine, you know, it's a and I say, Mary, because most of us you know, don't really so it's In that sense I think I've been present so I don't feel the difference here. I could be you know, it could be a guy can be I don't feel the difference yet.

57 Weverton: Do you have any memories from Ecuador?

58 Jennifer: I was in an all girls school. So again you don't feel the you don't feel the difference. I did feel kind of being like, the only kind of one of the very few girls in college because of something like 80% guys and for the first time going from an old girl school basically being dropped in and all guys cool does the change. By they are but you know, we were at an age where they just wanted to please us and be nice to us. They didn't want to, you know, be the bad guy. Yeah, so I didn't have anything but positive experience. So they just remember who tried to include us in every single thing you know, from soccer where they had to like tone it down. Because they don't want to, you know, hit us too hard, you know, to, you know, going out drinking, where they would kind of look out, perhaps and stuff like that.

59 Weverton: Nice. And what does it mean to you to be a woman doing a PhD in mathematics?

60 Jennifer: Oh, when it comes to a PhD, I do feel that need to prove, you know, to to be better, to be better than the average to be more aware and more informed. Just because I know that some, you

know, some cards are stacked against me, or will be in the future. So right now that I'm going on, you know, the job market, I'm trying to acquire all the information that I can on how to improve my CV or how to make the most of what I got going. And just while I was doing my PhD, I did feel that, you know, it's less likely that you have, well. In my case, you know, I have a specific, you know, my advisor is not somebody that goes in, you know, hangs out with her students and [inaudible] it's just not, it's just not their nature. But I know some professors do that and they don't, for some coincidence, you know, they don't have girls in their, among their students. And they have that kind of, so you do feel like okay, I have to be better because I don't have the advantage of going to hang out and private time with my professor to prove to them that I'm cool, I'm like bold and I'm a good hire, that they can trust me, that they can see me in a different light. You know, I get, you know, they see me in one way. And if I don't, you know, to the best I can. And those circumstances, I don't get all these other advantages that you can See that these people get, you know, especially men, you know, women, there aren't that many and the women are in the department. They don't just go grab their girls and go for girls. They probably should, but they don't. So there's that lack of camaraderie among women, they don't take pupils personally. Men do a lot of the especially the younger professors. I mean, even I've been invited to some of those Hangouts On occasions. And you can just see the difference, a different world, it's a different experience. So you realize, okay, you know, I wish I had this advantage that you know, you know, you got that in my was like maybe once in a lifetime fight, they're not tuition, through Professors don't know you circle there and they've always been removed from my circle. And I don't include in conferences that I get to go hang out with you know a good mix with everyone and get them to know me in a different light, you know, like yeah, I can be cool I can, you know, have a beer and relax a little bit and have a professional, you know, conversation or have an intellectual debate, improve what I can do and the ideas that I can bring to the table and an informal setting, which is really important when you want to, you know, get to know somebody and recommend them. So in that sense, I feel like yeah, I have to guess much information and everything like more and try to be as well rounded as I can.

61 Weverton: Weverton: And can you tell me a moment you felt frustrated about being a woman in mathematics?

62 Jennifer: I don't know if it has to do with mathematics specifically, but just being such a male centered field, especially. It's really annoying to have to deal with anything sort of rumors or people talking behind your back that eventually gets back to you is not people it's always guys. So, it's, you know, but I think that of course, I mean, that happens everyone right in people talk behind your back people are going to criticize you for ABC, but in mathematics, especially when you feel those personal criticisms or, or or some sort of judgment that has come. You know, does not stand from your academic performance is and it's something directed towards your personality or your private life. And somebody in a position of power, you know, is judging you based on something that you know, should not have been brought into the conversation and it gets back to you. You know, That that wouldn't have happened. If you know, probably a woman had come into, you know, they're less likely to go eat, especially somebody empowered to go and continue spreading it around. So in that sense, I don't know if it's mathematics, but sometimes just having a little boys club, it creates a hostile environment and you can not it just can't let it get to you. So you just have to be really, like kind of aggressive and not care, but it's hard to not care. Because, you know, they're not making the same judgments about their friends about you know, their little group.

63 Weverton: Was the specific experience that he was telling you say about these, these things that happen aabout people commenting

64 Jennifer: Yeah. I mean, I definitely had that experience, um just rumors about who you had been hanging out and obviously people get them wrong you know people get it wrong and it's like no that did not happen like oh my god you thought know so stuff like in even worse than you were just like wait that person was commenting about this like I was completely unacceptable you

know like I'm glad you guys were having fun with that is unacceptable certain people in certain issues to should not get comments about my choices are my private lives and you know stuff like that because that is the cycle that is created when you have professors hanging out with the kids. They forget they are professors and the kids forget that these people are in a position that to ruin or you know make they less. And they try to expect so obviously if you tell your, you know, Professor, your advisors, something very confidential, you're extending a hand you're giving yourself you're putting yourself at a different level with them. And of course people love to gossip no matter how a professor or older anything. It just it's like oh my God, this student is trusting me with this better information that says I'm slightly inebriated, I'm just going to you know, comment and have a laugh about it. So, in that sense, that cycle is so I've had those issues where I find out all and then I get mad. Kind of like, Okay, you guys are out line. Thankfully, it hasn't really I haven't let it affect me. But you have to grow like really thick skin when those things happen and I've had to grow really thick skin And I've just gone, you know, and I confronted the kids because I can't confront the older people. So I can just grab the kids and I've had to, you know, I had to grab them all together in a room and give them a piece of my mind just told them, you know, how could you guys do that? Like how stupid? Yeah, you know women don't have an advantage. You don't get to tell it a little bit of you know, confidential information to your advisor that's going to make her feel better if you know, you have a woman advisor or make her feel interesting or cool or you know it that that does not happen. So in that sense, yeah, I had an experience like that and it was unpleasent.

65 Weverton: And can you tell me a moment you felt positively about being a woman in mathematics?

66 Jennifer: I like the opportunities. There are a lot of opportunities and I like that that people are there to give a chance and a lot of people say, Oh, yeah, you know, like, I wanted to apply To this grant but it’s women and minorities primarily. And I'm like, yeah, cuz you guys have had the leg up, you know, for a couple of millennia. So now we're trying to get, you know, our half. So I don't have a problem, you know, but I have certainly felt that and it feels great. I know I don't I don't feel that we should apologize for it. It's like, yeah, we need we need an extra hand because we're being stepped out on so many other areas. And when we're young and starting, we have a lot of opportunities. I love that. There's a lot of opportunity. I've traveled to so many conferences and given so many talks because of the you know, that everyone says, Oh, yeah, she used the woman card. For she's the minority card. Yeah, amazing. And I really needed everyone else uses the guy card. So

67 Weverton: How can you describe the agenda makeup of your department?

68 Jennifer: I think right now it's about it's about like 50/50 almost I don't know. I yeah I hangout with mostly my office mates just like 5050 as well as like two girls two guys. And I don't feel that it honestly, I don't think it's so much like the you know, the The gender makeup is, is it's it's particular I think it's just like it's from so many different backgrounds. So everyone kind of comes together in different ways so you don't see it, you know, so I don't really feel that it's 5050 always feels like more guys playing Can you count them? I think they're all girls. But the girls don't hang out socially as much as the guys either because they are moms or or because they hang out among themselves. And yeah, so I feel like it definitely feels like less girls

69 Weverton: does that in the makeup also applies for faculty like 5050?

70 Jennifer: Oh no that’s like way less I do not know how much less but it's a lot we could just look at the in the 8th floor, they have all the pictures.

71 Weverton: And how do you feel about this gender makeup?

72 Jennifer: in the department I think they have done a good job, especially since I got here. It has been a definite very obvious kind of we're admitting half women, half men, and trying to gives like, very kind of in your face, we're making a conscious choice. I hope it continues the same way. I do think that there could be more more women. You know, it's because they drop out, you know, they drop out and then the so one thing is when you admit, and then I don't know, how many make it. You know, I don't know the composition of the Department of the higher years. I don't think a lot of people have dropped out from my year, but there's been a fair amount. In The younger years like I know, two girls just dropped out, you know, a little all together. So then, you know, it was already altered. There's, and it's small classes. I mean, you admit what like 15. So you know, so having two girls are gone. It's a big change. Yeah, certainly. And so in that sense, yeah, I definitely feel like it couldn't, it could be better, especially at the higher levels, especially at the higher levels, because it has to work out from top. As I said, I'm thick skin like I'm tough. I can only imagine how some of my friends who are not as you know, as have such an aggressive personality would have dealt with the stuff that I've had to deal with, which is why they don't interact they try to stay away, because they know the risks of just getting too much in the in the mix. They know that they're not going to come out, you know, looking good or there, they will have to deal with extra stuff. So I do feel that it's unfair, and that's because you don't have options we had, you know, 5050 professor, you know, the power would be, you know, more women will call out these guys that are kind of like creating this little boys club that would be like, Okay, hold on because my kids are being affected by your kids, you know, you would have these little like turf wars and then they would help set us straight, instead of us having to fight them on ourselves. So that there's no unprofessional behavior from a student towards a professor. It should be the other way around.

73 Weverton: And do you have anything in mind why some girls drop out? Is that because of this connection of like, I'm trying to understand what you're thinking about.

74 Jennifer: Well, those two they didn't like it. They just say you know, I just want my masters. They didn't like it. I have not seen a lot of women dropout for a uniform reason and also in this department in particular, usually their tastes change. So if they drop out of the program, you know, go to math ed or something else, or I think somebody moved to geology because it tastes change and it's like No, I did not sign up for this. But I guess it could also be Yeah, I mean, maybe there is an underlying you know, you I have seen that a lot of the beginning a lot of the kids are isolated, because they don't know anyone and I can imagine that can contribute. I mean, if you feel lonely and it happens to guys, too guys that are very sensitive that are very shy. They get lumped in you know, with with, with the girls that are on the edges trying to trying to get in but scared to do so. They're because they're more I don't know they're less forceful, less pushy. And then these guys feel super isolated. I've had more guys and girls Tell me kind of like, I don't hang out with anyone like I'm on my own, and it feels awful. And it can do homework with anyone and a lot of them are confused. So I think people in general drop out because the environment is not that welcoming. And it's a hard, it's just a hard career.

75 Weverton: And do you think that this gender makeup of the department is typical or a typical across other departments of mathematics?

76 Weverton: I think it's very atypical. I mean, there's a lot more women here, then I think in like the majority of math departments, that's just my perception, just because I've heard and I've read stats, and I've always thought, you know, no, in my department, it's really not like that. And I do think it's because a lot of I mean, this department is it does not foster hardcore competition among the kids from my from the beginning. And that's in that sentence, completely different from a lot of other departments.

77 Weverton: Can you tell me more about it?

78 Jennifer: So, I mean, my parents when they went to grad school, you know, they did not go to

mathematics, which is more competitive, you know, the, in general, the other departments, they were to, you know, it's etmology where they go into the field together, they have more opportunities to be friends and interact, because you're stuck in the wilderness for a week, or something. They just told me, be careful, look out because nobody is going to help you, and everyone's out to get you. And you know, if you fall down, that's a great opportunity for everyone else to get ahead. And they were like, I'm going to try to screw you over and the chance to again, I mean, my parents had people like, check out all the books have a specific topic from the library, when they had to do homework on it, or something. And try to trip, like just kind of ruined the other kids, because in the past, there was no internet, right? And I just remember being really scared. Kind of like, they were like, oh, if you think they will help you in the home, and your homework, you've gotta run to like here, Kathy, you're on your own, because that was their experience. very competitive kind of aggressive cohort that did not collaborate at all. So everyone was on the road and I had a completely different experience I think because math is hard everyone panics and everyone was like if I don't grab on to the person next to me and study I'm going to die and everyone else was gonna die as well. So I think that fear kind of worked you know in the right way for us and also they don't make us they don't make us go they don't pit us against each other. They don't pass against each other you don't have professors being you know, like oh Can someone so as your question and so and so cannot okay then you know, can you please help someone so who clearly did not you know, they don't have had that happen in undergrad where they would be like, okay, you did not do it. Now you can you help this little silly person that is not you know, stuff like that. That's horrible because you automatically hate that other person. that answered the question. So they don't do that in wrestling, it was completely opposite like work together and groups guys get together and work Think about it. And that's what happened. So as much as it was a high pressure, fate always some and also my groups have been really good. I haven't seen them, you know, have this. You know, I'm going to an undergrad, it was very competitive in Florida, you didn't like I took topology I remember and here all the kids are together working on a topology homework of Florida, like, my friends would be like, Oh, we didn't figure out the problem. Maybe you shouldn't be in this class you know? And I had to work you know,my ass off alone, because they will not help you. And I think it's just because it was. We have that kind of like, interactions with the professors, but just be like, okay, who's the best Who can tell me who can do it, who can do the most problems who can go and dazzle me with a great solution. Here it's not that's more like, Are you understanding will you be able to, you know, to the exam and you know and while understanding the topic and not just like memorizing so the professors here. Yeah, I think I think it came from ago I almostly feel like the chair of the grad we're we're trying to foster this sort of thing.

79 Weverton: Nice. And what are the things that you think people for different gender than yours would be surprised to know about your experiences as a math student?

80 Jennifer: I don’t know, I think they haven't been particularly tied to gender except for, you know, one or two bad experiences, but I think we can. We can find that in like every corporate environment, right? I mean, that's across the entire planet. Surprising. Maybe the being inside when it's at a lower level, you know, and all your classmates are guys They either are no issues, they're actually really nice and really welcoming and they try to help you out, which is kind of the opposite of what you would think that they would like put women down and kind of, you know, isolate them. And that the real issues comes when there is an imbalance in power. And when you introduce a male superior, who is tilting the balance because us kids, like if left to our own devices, even if it's, you know, 90% men 10% women. I actually feel that the women we were the ones organizing [inaudible but I think very im portant] and the guys were like, Oh, thank you. I actually haven't done the homework. I have mostly for exam I really need to great you guys are organizing you have a room, you know, stuff like that. And they would welcome the organization or like, kind of aspect or you know that that little skills that we women always bring, you know, we're always the ones that are organizing stuff. But I think when you are trying to vaifer somebody's attention, especially when it's a professor if somebody that you need to impress, for your career to go forward, that's when women end up in the losen side. So I think that that's surprising, you

know, from from mathematics. My experience with my classmates has been particularly good.

81 Weverton: And what do you think are the mathematically strongest people in the department?

82 Jennifer: Oh do you want names?

83 Weverton: It could be?

84 Jennifer: Yes. Who is the mathematically strong? I think my office mate, way, way dang. He is. He works with the machine learning. He's very, very good. Just published a number of papers has an incredible understanding of both applications and theory.um Who else is good? I think on the pure side, there's one kid who recently published oh yeah haNG dU. Very, very good. I think right now he's kind of lagging behind ran into some issues, but he's a Pure math mathematician. He's very brilliant, very well prepared, and he chose the right area to work on you are asking only students right?

85 Weverton: Um, faculty as well.

86 Jennifer: Oh Faculty. Yeah, there's a lot, there is a recent hire doctor who she won the NSF Early Career Award. I spoke with a superstar than here. And I don't know I just admire her from afar interpreter her classes are better whenever I know you. I took it. I took Committed to her. And yeah, she's one of the people that I absolutely admire. Not only the strong mathematician do, sir, her publication record is incredible. And her collaborators, I mean, it's like MIT and Harvard, you know. And that's it. You know that she does not collaborate with anything. Well, so she's a rising star. Yes, and she dresses awesome as well. So I really admire her. Yeah, so the young kids, those are the three that I can think of.

87 Weverton: Why do you think they are seen this way? [Jennifer: Why what?] Why do you think they are seen this way?

88 Jennifer: Well, I don't know if everyone else sees them as me they're very quiet kids. So I know of them. I know of my office mate because I proofread his papers. And it's, it's really nice to see them grow up. And he's such a hard working person. So I I don't know he's seen. I don't think people know him. I know I know him hmn. Also, I don't think people know of him. There are a lot of kids to put on a show that make other people think that they're good. You know, and I know who those guys are.

89 Weverton: How do they do that?

90 Jennifer:

91 Well, they show up looking absolutely disheveled, haven't showered in like five days or something paint splattered all over themselves. And they try to make this big show of working in the blackboard in front of, you know, maybe one person who's dumb enough to listen to them, you know, and they do know math, and then they are smart. But, you know, that's a lot of you know, they're like the influencer in the in the math department. And those are not the ones that actually you know, they're not the fashion designers. And then you have the other people that are way removed from that they don't put the show. But you can tell from the people that they're collaborating with. And also those kids that do that they don't publish. They put on a big show and then you check, oh, you haven't published. But then there's these quiet little, you know, people that are just like working. Because of your working you don't have time to go and make a show of yourself in front of everyone thinks you're good. So I think people yeah, I think those guys yeah, definitely make sure and I'm sure a lot of people would have named those Kansas. Oh, yeah, that's kind of very similar. Well, they're not going to make it into a postdoc. They smoke too much weed for that, you know, it's that they're out of their minds half the time.

92 Weverton: And what would you do to improve women's experience in the math department?

93 Jennifer: I don’t definitely have [inaudible] women and professors and try to try to get them to mentor more. We want to know how women and mentors that mentor us to the level that men can mentor. Why don't we get taken out to a bar and hang out with our advisor and being taught all these things? Why don't we get taking our speakers to another formal setting? Why is that always the guys? So I feel like in that sense, we need women mentors. Women that feel involved, you know that they invested not professors and just directly former part, and you know, they make sure you do a good career, but we need people to get their hands dirty, you know, with the kids. And I feel like that sounds women are failing us like the older ones, they are failing us. And they don't hang out among themselves either. There's very few interaction among faculty how that is. But it's even less among women try to find them together, never seen me two women to the department.

94 Weverton: And what do you think work well for women in this department?

95 Jennifer: I think the opportunities I mean, we definitely get like, you know, more chance to go to conferences, to talk I definitely feel like I have gone to a bunch of conferences that my guy friends have not gotten the funding to,and then I also do a lot of like I have to get the funds, you know, from a host of different sources and can prove to the department you know, that I am invested in so I think I've traveled the most of like, the kids and my year distant because sending us direct and you know and trying to go to workshops and trying to get you know, my name out there trying to do that. But I also think I know of course, I get all these opportunities because of a woman right, so I'm the first in line that they read, wich is just great, then that it is like on our side that since he had the department does a great job of giving us the chance to get our name out there and that men have definitely less of a chance like I've been trying to get a friend to like go to Congress and he is Chinese. So he gets even less of chance and do not get a lot of funding. you are international and you are male you know, here you are the majoerity, you know, in mathematics. We women have it easier.

96 Weverton: And the last question if you're meeting a woman that was trying to do a PhD math here, what are the experiences or advice that you tell her?

97 Jennifer: I would advise them to choose the right field and make sure that this department has the fields that they're interested in. And then of course, I would, you know, advise them which you have the qual system how to navigate that situation. Not to delay getting a mentor because if you delay too much in getting an advisor, you start lagging behind and you end up graduating in eight years or something. And as for being, like, specifically, you know, woman centered yet to take all the opportunities that we can get and not miss out on either They're a lot of work. But you never know if that is the one conference or somebody will really be interested in your work and you know, invite you to give a talk or get you a job. So, yeah, just take all the opportunities and make sure you know that you're in it for the long haul.

98 Weverton: Nice. Do you have one minute? [Jennifer: Oh sure] I would like to know one last thing I asked the other students I was curious about you. So if I asked you to draw the ideal mathematician for you. What would that be?

99 Jennifer: Oh the idea mathematician.

100 Weverton: You don’t need to worry about your drawing.

101 Jennifer: I'm trying to think it's a weird concept.the ideal mathematician. This is the toughest question because does it have to be like a specific person or you going for like a concept

102 Weverton: Anything

103

Jennifer: Anything. Can I take five seconds to thing? I'm just gonna draw my favorite mathematician and apartment that I really like. And I had a great experience in her class. here is just talking about things colliding with each other.[some non important conversaton after that].