

01/14 — *u*-Substitution

- ***“Too fast through arctan *u*-sub & notes on screen too small”***: Sorry about that. I try to keep a pace that is as comfortable as possible while still getting through all the material. Of course, that will not be the right pace for everyone. If you still want to see more of it, remember there are lots of help resources at USC! Also, I will try to write larger.
- ***“More examples solved together would be helpful”***: We only have so much time for me to let ya’ll try examples and I try to do as many as possible. However, I could do 100 examples per lecture and it still does not necessarily help *you* do them. But remember, that is why I have all the ungraded extra problems on MyMathLab for you to try!
- ***“You talk fast”***: If it is way too fast, let me know. I do not notice. But like professors with accents, over time, you will adjust to a slightly faster than normal speaking pace.
- ***Do you sleep on weekends?”***: Oh boy, do I ever!



- ***“Thanks for providing resources with the syllabus”***: Of course! Remember, your mental health is important. If you or others might benefit from the resources mentioned, take advantage of them! The sheet is on Blackboard.
- ***“Glad to see your sleep schedule is still health”***: Naturally!



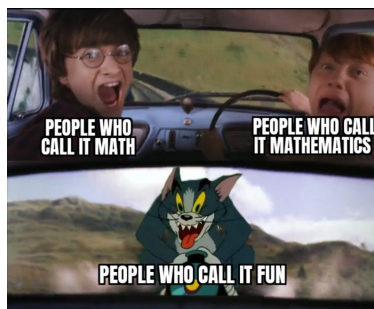
- ***“All together I was mildly confused, It’s been almost 2 years since 141 :(”***: Oof, that is rough buddy. But I am sure it will come back to you. But remember, there are lots of help resources available to help you get there!
- ***“Great policies + energy”***: Thanks! My friends call it my ‘tism’ energy.
- ***“Jumping right into coursework”***: You know me—doing my job and all. :P

- ***“TBH I don’t like the prewritten notes (I don’t retain it)”***: Sorry they did not work for you. I will try to figure out possibly alternatives for students that hate pre-written notes.
- ***“Rambling”***: Do I ramble? I do not really notice it. But then again, I can get distracted easily. It is like when I am watching television. At first I am watching a show, but then I get to thinking. “That is an interesting apron in this show.” Then I am thinking about how it reminds me of my grandmothers during Christmas. She would sometimes bake. I should do more baking. But when does one have the time for baking? I suppose I could sacrifice other time for the sake of baking but I would rather work on Math stuff. But then again, I was supposed to get to more programming work. What was that last idea I had for a program? Oh, it was that combinatorial game theory program I wanted to write. I should really get to that. . . wait, what were we talking about?
- ***“Thank you!”***:



01/16 — Integration-by-Parts

- ***“fun”***:



- ***“I [heart] LIATE”***: Me too. I think it is better than ‘LIPTE’, which just sounds like a gross tea you brew.
- ***“Not gonna LI, you ATE, with this lesson :)”***: Commenting on my weight?! Hurtful. I CAN’T GET OZEMPIC, OKAY!
- ***“Sometimes I forget how to integrate quickly or in my head. These problems require that.”***: That is just fine! Remember, eventually, you will want to do linear u -subs in your head. But it is fine to be a bit shaky or slow with it at first!

- ***“I really appreciate the untraditional methods to make it easier and the many examples”***: Thanks, I wish I could take credit for many of them. But remember, you still have to practice them!
- ***“Will I ever have to use the other formula for this class?”***: I think you mean $\int u \, dv = uv - \int v \, du$? We are always using it for integration-by-parts; however, with our approach, the formula ‘pops out’, so we do not have to explicitly memorize it. But if you do not like the shortcut, then you will have to do these problems that way—or by some other method.
- ***“Just have to keep practicing memorizing diffs & integrals I need to know”***: Of course! Perfect practice makes perfect.
- ***“thank you!”***: Bitte schön
- ***“How can we check ourselves if it fails at home”***: Typically, you know LIATE fails when you get a dv that you cannot integrate.
- ***“Say wrong u instead of backwards, sorta confusing”***: Ooh, not a bad idea. But here I do think backwards might be the ‘right’ thing? In integration-by-parts, part is u and the rest is dv . The example I think you are referencing is that LIATE chose u for what it should have chosen for dv and vice versa. There are examples where LIATE does just get it wrong. However, while it was wrong here, it actually did choose them backwards—wrong but more descriptive of what went wrong.
- ***“You seem great, looking forward to this semester”***: Well, hold on there buddy! Give me a chance to be terrible too!
- ***“Huge packet scary! :(”***: I feel the same about large cheesecakes. However, just like me, you will get through it!

01/21 — Integration-by-Parts

- ***“What is $\sinh x \cosh x$ ”***: Ooh, they are nifty and do show up in Math/Physics/Engineering. However, I will not cover them in this course.
- ***“Still confused on the looping problems and the I thing”***: That is fine! They take a bit of practice. But it still does not sink in after some problems, ask for help!
- ***“Recognizing when to specifically use the methods”***: That is the tricky thing about this early part of the course! It takes practice to look at an integral and know what trick to try. However, this is something that should come with time. If it does not, please, ask for explicit recommendations. It is important!
- ***“Please write bigger”***: I will try to remember! But if you ever cannot read something, please, let me know!
- ***“What if it was $\cos^2 x$ or $\sin^2 x$ etc?”***: That is actually a different type of integral—trigonometric integral—that we will address later. However, there is a way to do this with integration-by-parts, but it is definitely overkill.
- ***“N/A U da goat”***: I am not familiar with ‘udagoat.’ Is that some kind of vape flavour?

- ***“That 1 kid asking questions”***: While others asking questions may not always please you, remember, just as I try to be patient with your learning, you need to be patient with other students’ learning!