

Last-Minute Tips

from Kha Le

1. Units - Do not forget to put units.
2. Indefinite Integral - Do not forget the $+c$.
3. Absolute Extrema - When finding absolute extrema, check endpoints.
4. Critical Points / Value - Critical points are points (a, b) , while critical values are values $(x = a)$.
5. EVT/MVT/IVT - Check conditions. Endpoints do not count toward these theorems.
6. Area vs. Integral - Area is always positive, as opposed to integrals. (e.g. $\int_{-\frac{\pi}{2}}^{\frac{\pi}{2}} \sin x dx$ is not the same as the area bounded by $\sin x$ from $-\frac{\pi}{2}$ to $\frac{\pi}{2}$)
7. U-Substitution - If you u-sub for integration, make sure to either change your bounds or substitute back at the end.
8. Quotient Rule - If you do not remember it, just remember the mnemonic: Low D High minus High D Low, Over Square of Below
9. Integrating $\frac{1}{x}$ - $\int \frac{1}{x} dx = \ln|x| + c$. Do not drop the absolute value bars.
10. Final Skim - Upon finishing a test, I recommend a 10 second skim of the whole test before turning it in. See if you forgot any units, forgot to correct or copy down an answer, wrote a point instead of a coordinate, and other potential sources of silly mistake.