Boring Math	Assignment 1	Ada Lovelace	486921
WS 2024		Emmy Noether	077734
Group 123		Margaret Hamilton	160769

Exercise 1

a) This is our Assignment!

i) We can now use pretty versions of φ and ε, the round verion of φ is also available: ϕ.

Common logic symbols are easy to use:
If $\mathsf{FO} \supseteq \Phi \models \mathfrak{A}$ for some infinite $\mathfrak{A}$, then for every cardinal $\kappa \geq |\mathfrak{A}|$ there exists a $\mathfrak{B} \models \Phi$ with $|\mathfrak{B}| \geq \kappa$.

And the same is true for complexity classes:
For any function $f(n) \in \Omega(\log n)$,
$\mathsf{NSPACE}(f(n)) = \mathsf{coNSPACE}(f(n))$ and $\mathsf{NSPACE}(f(n)) \subseteq \mathsf{SPACE}(f(n)^2)$.

We can also make some graphs: