

This is our Assignment!

We can now use pretty versions of  $\varphi$  and  $\varepsilon$ , the round verion of  $\varphi$  is also available:  $\phi$ .

Common logic symbols are easy to use:

If  $\text{FO} \supseteq \Phi \models \mathfrak{A}$  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  $f(n) \in \Omega(\log n)$ ,

$\text{NSPACE}(f(n)) = \text{co-NSPACE}(f(n))$  and  $\text{NSPACE}(f(n)) \subseteq \text{SPACE}(f(n)^2)$ .

We can also make some graphs:

