314 Let x , y , and n be natural variables. Let f: $nat \to nat$ be a function. Simplify
frame x· **new** y, m: nat· $m := n$. $x' = f\, m \ \wedge \ y' = f\,(m+1)$

After trying the question, scroll down to the solution.

§		**frame** x· **new** y, m: nat· $m := n$. $x' = f\,m \ \wedge\ y' = f\,(m{+}1)$	Substitution Law
	$=$	**frame** x· **new** y, m: nat· $x' = f\,n \ \wedge\ y' = f\,(n{+}1)$	expand **new**
	$=$	**frame** x· $\exists y, m, y', m'$: nat· $x' = f\,n \ \wedge\ y' = f\,(n{+}1)$	discard unused variables
	$=$	**frame** x· $\exists y'$: nat· $x' = f\,n \ \wedge\ y' = f\,(n{+}1)$	one-point
	$=$	**frame** x· $x' = f\,n$	expand **frame**
	$=$	$x' = f\,n \ \wedge\ y' = y \ \wedge\ n' = n$	assignment
	$=$	$x := f\,n$	