

## Equation assignment sequence for variable $x$

no	var	equ	quations	token
18	18	-	$M^{A,\beta}_N :: \text{port variable}$	
17	17	-	$M^{A,\alpha}_N :: \text{port variable}$	
16	14	-	$K^{A,\beta}_A :: \text{port variable}$	
15	3	-	$\# :: \text{port variable}$	
14	36	-	$D_{N,A} :: \text{port variable}$	
13	13	-	$K^{A,\alpha}_A :: \text{port variable}$	
12	8	-	$F_{N,A} :: \text{port variable}$	
11	1	-	$t :: \text{port variable}$	
10	22	8	$\pi^{A,\beta}_N := M^{A,\beta}_N . x_N$	
9	76	63	$u_A := \text{Instantiate}(u_A, \#)$	
8	21	7	$\pi^{A,\alpha}_N := M^{A,\alpha}_N . x_N$	
7	81	76	$\hat{x}^{A,\beta}_A := K^{A,\beta}_A . D_{N,A} \overset{N}{\star} \pi^{A,\beta}_N$	
6	81	80	$\hat{x}^{A,\beta}_A := \text{Instantiate}(\hat{x}^{A,\beta}_A, \#)$	
5	80	79	$\hat{x}^{A,\alpha}_A := \text{Instantiate}(\hat{x}^{A,\alpha}_A, \#)$	
4	80	75	$\hat{x}^{A,\alpha}_A := u_A . K^{A,\alpha}_A . D_{N,A} \overset{N}{\star} \pi^{A,\alpha}_N$	
3	26	12	$\hat{x}^{A,\beta}_N := F_{N,A} \overset{A}{\star} \hat{x}^{A,\beta}_A$	
2	25	11	$\hat{x}^{A,\alpha}_N := F_{N,A} \overset{A}{\star} \hat{x}^{A,\alpha}_A$	
1	29	16	$\dot{x}_N := \hat{x}^{A,\alpha}_N + \hat{x}^{A,\beta}_N$	
0	9	20	$x_N := \int_{t_o}^{t_e} \dot{x}_N \, dt + x_o_N$	