

Equation assignment sequence for variable n

no	var	equ	quations	token
61	12	-	$S_N :: \text{port variable}$	
60	26	-	$A^v :: \text{port variable}$	
59	64	-	$P_{NS,KS} :: \text{port variable}$	
58	29	-	$\lambda_S :: \text{port variable}$	
57	9	-	$r_{xN} :: \text{port variable}$	
56	88	-	$K^o_K :: \text{port variable}$	
55	62	-	$P_{N,NK} :: \text{port variable}$	
54	127	-	$D_{N,A} :: \text{port variable}$	
53	23	-	$r_{zN} :: \text{port variable}$	
52	10	-	$r_{yN} :: \text{port variable}$	
51	11	-	$U_N :: \text{port variable}$	
50	86	-	$N_{S,K} :: \text{port variable}$	
49	61	-	$P_{S,NS} :: \text{port variable}$	
48	60	-	$P_{K,NK} :: \text{port variable}$	
47	63	-	$P_{NK,KS} :: \text{port variable}$	
46	59	-	$P_{NS,AS} :: \text{port variable}$	
45	5	-	$F_{N,A} :: \text{port variable}$	
44	128	-	$D_{NS,AS} :: \text{port variable}$	
43	13	-	$V_N :: \text{port variable}$	

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no	var	equ	quations	token
42	1	-	$\# :: \text{port variable}$	
41	6	-	$t :: \text{port variable}$	
40	27	16	$Bo_N := \text{Instantiate}(S_N, \#)$	
39	69	47	$m_N := \lambda_S^{S \in NS} \star n_{NS}$	
38	16	7	$T_N := \frac{\partial U_N}{\partial S_N}$	
37	16	113	$T_N := \text{Instantiate}(T_N, \#)$	
36	87	64	$E_{a_{NK}} := \text{Instantiate}(P_{N,NK} \overset{N}{\star} R_N . T_{NK}, \#)$	
35	28	17	$R_N := A^v . Bo_N$	
34	115	91	$c^o_{KS} := \text{Instantiate}(c_{KS}, \#)$	
33	114	90	$c_{KS} := c_{NS} \overset{NS}{\star} P_{NS,KS}$	
32	71	49	$\rho_N := m_N . (V_N)^{-1}$	
31	50	37	$k_{xN}^c := \left(\lambda_S^{S \in NS} \star (\mu_{NS})^{-1} \right) . (V_N)^{-1} . \frac{\partial U_N}{\partial p_N} . v_{xN}$	
30	15	6	$p_N := \left(-\frac{\partial U_N}{\partial V_N} \right)$	
29	15	115	$p_N := \text{Instantiate}(p_N, \#)$	
28	65	46	$d_A := \text{sign} \left(F_{N,A} \overset{N}{\star} p_N \right)$	
27	4	3	$0.5 := \text{Instantiate}(\#, \#)$	
26	108	127	$c_{NS} := \text{Instantiate}(c_{NS}, \#)$	
25	108	84	$c_{NS} := (V_N)^{-1} \odot n_{NS}$	
24	21	12	$v_{xN} := \frac{\partial r_{xN}}{\partial t}$	
23	77	55	$T_{NK} := P_{N,NK} \overset{N}{\star} T_N$	

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no	var	equ	quations	token
22	89	65	$K_{NK} := K^o_K \odot \exp((-E_{a_{NK}}) \cdot (R_N \star^N P_{N,NK} \cdot T_{NK})^{-1})$	
21	116	92	$\phi_{KS} := \prod (c_{KS} \cdot (c^o_{KS})^{-1})$	
20	98	74	$\hat{V}_A := (\rho_N)^{-1} \cdot k^c_{xN} \cdot A_{yzN} \cdot D_{N,A} \star^N p_N$	
19	109	85	$c_{AS} := (0.5 \cdot (F_{NS,AS} - d_A \odot F_{NS,AS})) \star^{NS} c_{NS}$	
18	95	71	$A_{yzN} := r_{yN} \cdot r_{zN}$	
17	54	41	$k^d_{xNS} := (\mu_{NS})^{-1} \cdot (v_{xN} \odot ((V_N)^{-1} \odot \frac{\partial U_N}{\partial \mu_{NS}}))$	
16	45	114	$\mu_{NS} := \text{Instantiate}(\mu_{NS}, \#)$	
15	45	32	$\mu_{NS} := \frac{\partial U_N}{\partial n_{NS}}$	
14	93	69	$N_{NS,NK} := P_{S,NS} \star^S ((P_{K,NK} \cdot T_{NK} \cdot (T_{NK})^{-1}) \star^K N_{S,K})$	
13	117	93	$\xi_{NK} := K_{NK} \cdot P_{NK,KS} \star^{KS} \phi_{KS}$	
12	110	86	$\hat{n}^c_{AS} := \hat{V}_A \odot c_{AS}$	
11	73	51	$F_{NS,AS} := F_{N,A} \odot P_{NS,AS}$	
10	104	80	$\hat{n}^d_{AS} := A_{yzN} \odot (-k^d_{xNS}) \cdot D_{NS,AS} \star^{NS} \mu_{NS}$	
9	118	94	$\tilde{n}_{NS} := V_N \odot (N_{NS,NK} \star^{NK} \xi_{NK})$	
8	111	87	$\hat{n}^c_{NS} := F_{NS,AS} \star^{AS} \hat{n}^c_{AS}$	
7	105	81	$\hat{n}^d_{NS} := F_{NS,AS} \star^{AS} \hat{n}^d_{AS}$	
6	2	1	$0 := \text{Instantiate}(\#, \#)$	
5	8	5	$t_e := \text{Instantiate}(t, \#)$	
4	7	4	$t_o := \text{Instantiate}(t, \#)$	
3	150	124	$n^o_{NS} := \text{Instantiate}(n_{NS}, \#)$	

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no	var	equ	quations	token
2	119	95	$\dot{n}_{NS} := \hat{n}_{NS}^c + \hat{n}_{NS}^d + \tilde{n}_{NS}$	
1	119	129	$\dot{n}_{NS} := \text{Instantiate}(\dot{n}_{NS}, 0)$	
0	42	116	$n_{NS} := \int_{t_o}^{t_e} \dot{n}_{NS} \, dt + n_{NS}^o$	