Equation assignment sequence for variable n_{NS}

no	var	equ	quations	token
96	$V_1 0$	-	r_{xN} :: port variable	
95	$V_1 27$	-	1_S :: port variable	
94	$V_1 47$	-	P_{NK} :: port variable	
93	$V_4 0$	-	λ_S :: port variable	
92	$V_1 4$	-	S_N :: port variable	
91	$V_2 00$	-	$I_{NS,AS}$ :: port variable	
90	$V_1 83$	-	${k^{d,Fick}}_{NS}$ :: port variable	
89	$V_2 4$	-	A^v :: port variable	
88	$V_1 55$	-	B :: port variable	
87	V_8	-	$F_{N,A}$ :: port variable	
86	$V_1 2$	-	r_{zN} :: port variable	
85	$V_1 1$	-	r_{yN} :: port variable	
84	$V_1 3$	-	U_N :: port variable	
83	$V_2 01$	-	$I_{N,A}$ :: port variable	
82	$V_3 8$	-	${K^o}_K$ :: port variable	
81	$V_3 3$	-	$P_{K,NK}$ :: port variable	
80	$V_1 58$	-	$N_{K,KS}$ :: port variable	
79	$V_9 0$	-	$D_{N,A}$ :: port variable	
78	$V_9 1$	-	$D_{NS,AS}$ :: port variable	

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no	var	equ	quations	token
77	$V_3 6$	-	$P_{NS,KS}$ :: port variable	
76	$V_3 5$	-	$P_{N,NK}$ :: port variable	
75	$V_1 5$	-	V_N :: port variable	
74	$V_7 0$	-	$F_{NS,AS}$ :: port variable	
73	V_1	-	$\#$ :: port variable	
72	V_5	-	t :: port variable	
71	$V_4 4$	$E_2 3$	$k^q_{xN} := (V_N)^{-1} \cdot \frac{\partial U_N}{\partial T_N} \cdot v_{xN}$	
70	$V_5 6$	$E_3 5$	$h_{NS} := H_N \odot (n_{NS})^{-1}$	
69	$V_7 6$	$E_5 3$	$\_k^q_{xN} := k^q_{xN}$	
68	$V_7 5$	$E_5 2$	$\_h_{NS} := h_{NS}$	
67	$V_9 5$	$E_7 0$	$\hat{H}^d{}_A := \left(F_{NS,AS} \overset{NS}{\star} \_h_{NS}\right) \overset{S \in AS}{\star} \hat{n}^d{}_{AS}$	
66	$V_1 06$	$E_8 1$	$\hat{q}_{xA} := (A_{yzN} \cdot \_k^q_{xN} \cdot D_{N,A}) \overset{N}{\star} T_N$	
65	$V_1 04$	$E_7 9$	$\hat{w}_A :=$ Instantiate$(\hat{H}^c{}_A, \#)$	
64	$V_1 02$	$E_7 7$	$\hat{H}^c{}_A := \left(F_{NS,AS} \overset{NS}{\star} \_h_{NS}\right) \overset{S \in AS}{\star} \hat{n}^c{}_{AS}$	
63	$V_4 1$	$E_2 0$	$\_\lambda_S := \lambda_S$	
62	$V_4 2$	$E_2 1$	$C_{pN} := \frac{\partial H_N}{\partial T_N}$	
61	$V_9 6$	$E_7 1$	$\hat{H}^d{}_N := F_{N,A} \overset{A}{\star} \hat{H}^d{}_A$	
60	$V_1 07$	$E_8 2$	$\hat{q}_N := F_{N,A} \overset{A}{\star} \hat{q}_{xA}$	
59	$V_1 05$	$E_8 0$	$\hat{w}_N := F_{N,A} \overset{A}{\star} \hat{w}_A$	
58	$V_1 03$	$E_7 8$	$\hat{H}^c{}_N := F_{N,A} \overset{A}{\star} \hat{H}^c{}_A$	

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no	var	equ	quations	token
57	$V_5 7$	$E_3 6$	$m_N := \_\lambda_S \overset{S \in NS}{\star} n_{NS}$	
56	$V_8 2$	$E_5 9$	$\_Cp_N := C_{pN}$	
55	$V_2 18$	$E_1 83$	$T^{ref}{}_N := \text{Instantiate}(T_N, -)$	
54	$V_1 08$	$E_8 3$	$\dot{H}_N := \hat{H}^c{}_N + \hat{H}^d{}_N + \hat{q}_N + \hat{w}_N$	
53	$V_6 7$	$E_4 5$	$\_c_{NS} := c_{NS}$	
52	$V_2 8$	$E_1 5$	$v_{xN} := \frac{\partial r_{xN}}{\partial t}$	
51	$V_5 8$	$E_3 7$	$\_m_N := m_N$	
50	$V_5 2$	$E_3 1$	$k^d_{xNS} := (\mu_{NS})^{-1} \,.\, \left(v_{xN} \odot \left((V_N)^{-1} \odot \frac{\partial U_N}{\partial \mu_{NS}}\right)\right)$	
49	$V_2 0$	E_9	$H_N := U_N - p_N \,.\, V_N$	
48	$V_2 0$	$E_1 84$	$H_N := \_Cp_N \,.\, \left(T_N - T^{ref}{}_N\right)$	
47	$V_2 0$	$E_8 7$	$H_N := \int_{t^o}^{t^e} \dot{H}_N \; dt$	
46	$V_1 68$	$E_1 34$	$n_{tN} := 1_S \overset{S \in NS}{\star} n_{NS}$	
45	$V_1 65$	$E_1 32$	$B_N := \text{Instantiate}(S_N, \#)$	
44	$V_1 52$	$E_1 24$	$c^o{}_{NK,KS} := \text{Instantiate}(c_{NK,KS}, \#)$	
43	$V_1 51$	$E_1 23$	$c_{NK,KS} := P_{NK} \,.\, \left(P_{NS,KS} \overset{NS}{\star} \_c_{NS}\right)$	
42	$V_4 8$	$E_2 7$	$k^c_{xN} := \left(\lambda_S \overset{S \in NS}{\star} (\mu_{NS})^{-1}\right) \,.\, (V_N)^{-1} \,.\, \frac{\partial U_N}{\partial p_N} \,.\, v_{xN}$	
41	$V_5 9$	$E_3 8$	$\rho_N := \_m_N \,.\, (V_N)^{-1}$	
40	$V_1 94$	$E_1 60$	$k^d_{xAS} := I_{NS,AS} \overset{NS}{\star} k^d_{xNS}$	
39	$V_1 8$	$E_1 85$	$T_N := Root\,(H_N)$	
38	$V_1 8$	E_7	$T_N := \frac{\partial U_N}{\partial S_N}$	

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no	var	equ	quations	token
37	$V_1 8$	$E_1 91$	$T_N := Root\,(0_N)$	
36	$V_1 69$	$E_1 35$	$\xi_{NS} := (n_{tN})^{-1} \odot n_{NS}$	
35	$V_1 66$	$E_1 33$	$R_N := A^v \,.\, B_N$	
34	$V_1 88$	$E_1 54$	${k^{d,Fick}}_{AS} := I_{NS,AS} \overset{NS}{\star} {k^{d,Fick}}_{NS}$	
33	$V_6 2$	$E_4 1$	${E^a}_{NK} := \text{Instantiate}(R \,.\, T_{NK}, \#)$	
32	$V_6 0$	$E_3 9$	$T_{NK} := P_{N,NK} \overset{N}{\star} T_N$	
31	$V_1 57$	$E_1 27$	$R := A^v \,.\, B$	
30	$V_1 53$	$E_1 25$	$x_{NK,KS} := {(c^o{}_{NK,KS})}^{-1} \,.\, c_{NK,KS}$	
29	$V_9 7$	$E_7 2$	$d_A := \text{sign}\left(F_{N,A} \overset{N}{\star} p_N\right)$	
28	V_4	E_3	$0.5 := \text{Instantiate}(\#, \#)$	
27	$V_8 1$	$E_5 8$	$\_k^c{}_{xN} := k^c{}_{xN}$	
26	$V_7 4$	$E_5 1$	$\_\rho_N := \rho_N$	
25	$V_7 1$	$E_4 8$	$A_{yzN} := r_{yN} \,.\, r_{zN}$	
24	$V_1 7$	E_6	$p_N := \left(-\frac{\partial U_N}{\partial V_N}\right)$	
23	$V_2 09$	$E_1 73$	$\_k^d{}_{xAS} := k^d{}_{xAS}$	
22	$V_1 9$	E_8	$\mu_{NS} := \frac{\partial U_N}{\partial n_{NS}}$	
21	$V_1 9$	$E_1 36$	$\mu_{NS} := (R_N \,.\, T_N) \odot ln(\xi_{NS})$	
20	$V_6 6$	$E_4 4$	$c_{NS} := (V_N)^{-1} \odot n_{NS}$	
19	$V_2 15$	$E_1 79$	$A_{yzA} := I_{N,A} \overset{N}{\star} A_{yzN}$	
18	$V_2 05$	$E_1 69$	$\_{k^{d,Fick,A}}_{AS} := {k^{d,Fick}}_{AS}$	

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no	var	equ	quations	token
17	$V_6 3$	$E_4 2$	$K_{NK} := {K^o}_K \odot exp((-{E^a}_{NK}) \,.\, (R \,.\, T_{NK})^{-1})$	
16	$V_1 60$	$E_1 29$	$\phi_{NK} := \prod_{KS} {x_{NK,KS}}^{N_{NK,KS}}$	
15	$V_1 59$	$E_1 28$	$N_{NK,KS} := P_{K,NK} \overset{K}{\star} N_{K,KS}$	
14	$V_9 8$	$E_7 3$	$c_{AS} := (0.5 \,.\, (F_{NS,AS} - d_A \odot \lvert F_{NS,AS} \rvert)) \overset{NS}{\star} c_{NS}$	
13	$V_9 2$	$E_1 40$	$\hat{V}_A := \text{Instantiate}(\hat{V}_A, \#)$	
12	$V_9 2$	$E_6 7$	$\hat{V}_A := (\_\rho_N)^{-1} \,.\, \_k^c{}_{xN} \,.\, A_{yzN} \,.\, D_{N,A} \overset{N}{\star} p_N$	
11	$V_9 3$	$E_6 8$	$\hat{n}^d{}_{AS} := A_{yzA} \odot \left(-\_k^d_{xAS}\right) \,.\, D_{NS,AS} \overset{NS}{\star} \mu_{NS}$	
10	$V_9 3$	$E_1 52$	$\hat{n}^d{}_{AS} := A_{yzA} \odot \left(-\_{k^{d,Fick,A}}{}_{AS}\right) \,.\, D_{NS,AS} \overset{NS}{\star} c_{NS}$	
9	$V_1 63$	$E_1 30$	$\tilde{n}_{NS} := V_N \overset{N}{\star} \left(P_{N,NK} \overset{NK}{\star} \left((K_{NK} \,.\, \phi_{NK}) \,.\, \left(P_{NS,KS} \overset{KS}{\star} N_{NK,KS}\right)\right)\right)$	
8	$V_9 9$	$E_7 4$	$\hat{n}^c{}_{AS} := \hat{V}_A \odot c_{AS}$	
7	$V_9 4$	$E_6 9$	$\hat{n}^d{}_{NS} := F_{NS,AS} \overset{AS}{\star} \hat{n}^d{}_{AS}$	
6	$V_1 64$	$E_1 31$	$\_\tilde{n}_{NS} := \tilde{n}_{NS}$	
5	$V_1 00$	$E_7 5$	$\hat{n}^c{}_{NS} := F_{NS,AS} \overset{AS}{\star} \hat{n}^c{}_{AS}$	
4	V_7	E_5	$t^e := \text{Instantiate}(t, \#)$	
3	V_6	E_4	$t^o := \text{Instantiate}(t, \#)$	
2	$V_1 10$	$E_8 5$	${n^o}_{NS} := \text{Instantiate}(n_{NS}, \#)$	
1	$V_1 01$	$E_7 6$	$\dot{n}_{NS} := \hat{n}^c{}_{NS} + \hat{n}^d{}_{NS} + \_\tilde{n}_{NS}$	
0	$V_1 6$	$E_8 6$	$n_{NS} := \int_{t^o}^{t^e} \dot{n}_{NS} \; dt + {n^o}_{NS}$	