## Equation assignment sequence for variable n

no	var	equ	quations	token
58	12	_	$S_N$ :: port variable	
57	26	_	$A^v$ :: port variable	
56	64	-	$P_{NS,KS}$ :: port variable	
55	29	-	$\lambda_S$ :: port variable	
54	9	-	$r_{xN}$ :: port variable	
53	88	_	$K^{o}_{K}$ :: port variable	
52	62	_	$P_{N,NK}$ :: port variable	
51	127	_	$D_{N,A}::$ port variable	
50	23	_	$r_{zN}$ :: port variable	
49	10	_	$r_{yN}$ :: port variable	
48	11	_	$U_N$ :: port variable	
47	86	_	$N_{S,K}$ :: port variable	
46	61	_	$P_{S,NS}$ :: port variable	
45	60	_	$P_{K,NK}$ :: port variable	
44	63	_	$P_{NK,KS}$ :: port variable	
43	59	_	$P_{NS,AS}$ :: port variable	
42	5	_	$F_{N,A}$ :: port variable	
41	128	-	$D_{NS,AS}$ :: port variable	
40	13	_	$V_N$ :: port variable	

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no	var	equ	quations	token
39	1	-	# :: port variable	
38	6	-	t:: port variable	
37	27	16	$Bo_N := \operatorname{Instantiate}(S_N, \#)$	
36	69	47	$m_N := \lambda_S \overset{S \in NS}{\star} n_{NS}$	
35	16	7	$T_N := \frac{\partial U_N}{\partial S_N}$	
34	16	113	$T_N := \text{Instantiate}(T_N, \#)$	
33	87	64	$E_{aNK} := \operatorname{Instantiate}(P_{N,NK} \stackrel{N}{\star} R_N . T_{NK}, \#)$	
32	28	17	$R_N := A^v \cdot Bo_N$	
31	115	91	$c^o_{KS} := \operatorname{Instantiate}(c_{KS}, \#)$	
30	114	90	$c_{KS} := c_{NS} \overset{NS}{\star} P_{NS,KS}$	
29	71	49	$\rho_N := m_N \cdot (V_N)^{-1}$	
28	50	37	$k_{xN}^c := \left(\lambda_S \overset{S \in NS}{\star} (\mu_{NS})^{-1}\right) \cdot (V_N)^{-1} \cdot \frac{\partial U_N}{\partial p_N} \cdot v_{xN}$	
27	15	6	$p_N := \left(-\frac{\partial U_N}{\partial V_N}\right)$	
26	15	115	$p_N := \operatorname{Instantiate}(p_N, \#)$	
25	65	46	$d_A := \operatorname{sign}\left(F_{N,A} \stackrel{N}{\star} p_N\right)$	
24	4	3	0.5 := Instantiate(#, #)	
23	108	84	$c_{NS} := (V_N)^{-1} \odot n_{NS}$	
22	21	12	$v_{xN} := \frac{\partial r_{xN}}{\partial t}$	
21	77	55	$T_{NK} := P_{N,NK} \stackrel{N}{\star} T_N$	
20	89	65	$K_{NK} := K^{o}_{K} \odot exp((-E_{aNK}) \cdot \left(R_{N} * P_{N,NK} \cdot T_{NK}\right)^{-1})$	

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no	var	equ	quations	token
19	116	92	$\phi_{KS} := \prod \left( c_{KS} \cdot \left( c^o_{KS} \right)^{-1} right \right)$	
18	98	74	$\hat{V}_A := (\rho_N)^{-1} \cdot k_{xN}^c \cdot A_{yzN} \cdot D_{N,A} \stackrel{N}{\star} p_N$	
17	109	85	$c_{AS} := (0.5 \cdot (F_{NS,AS} - d_A \odot  F_{NS,AS} )) \stackrel{NS}{\star} c_{NS}$	
16	95	71	$A_{yzN} := r_{yN} \cdot r_{zN}$	
15	54	41	$k_{xNS}^d := (\mu_{NS})^{-1} \cdot \left( v_{xN} \odot \left( (V_N)^{-1} \odot \frac{\partial U_N}{\partial \mu_{NS}} \right) \right)$	
14	45	114	$\mu_{NS} := \operatorname{Instantiate}(\mu_{NS}, \#)$	
13	45	32	$\mu_{NS} := \frac{\partial U_N}{\partial n_{NS}}$	
12	93	69	$N_{NS,NK} := P_{S,NS} \stackrel{S}{\star} \left( \left( P_{K,NK} . T_{NK} . (T_{NK})^{-1} \right) \stackrel{K}{\star} N_{S,K} \right)$	
11	117	93	$\xi_{NK} := K_{NK} \cdot P_{NK,KS} \overset{KS}{\star} \phi_{KS}$	
10	110	86	$\hat{n}^c{}_{AS} := \hat{V}_A \odot c_{AS}$	
9	73	51	$F_{NS,AS} := F_{N,A} \odot P_{NS,AS}$	
8	104	80	$\hat{n}^d_{AS} := A_{yzN} \odot \left( -k_{xNS}^d \right) \cdot D_{NS,AS} \stackrel{NS}{\star} \mu_{NS}$	
7	118	94	$\tilde{n}_{NS} := V_N \odot \left( N_{NS,NK} \stackrel{NK}{\star} \xi_{NK} \right)$	
6	111	87	$\hat{n}^c{}_{NS} := F_{NS,AS} \stackrel{AS}{\star} \hat{n}^c{}_{AS}$	
5	105	81	$\hat{n}^d{}_{NS} := F_{NS,AS} \stackrel{AS}{\star} \hat{n}^d{}_{AS}$	
4	8	5	$t_e := \operatorname{Instantiate}(t, \#)$	
3	7	4	$t_o := \text{Instantiate}(t, \#)$	
2	150	124	$n^o_{NS} := \text{Instantiate}(n_{NS}, \#)$	
1	119	95	$\dot{n}_{NS} := \hat{n}^c{}_{NS} + \hat{n}^d{}_{NS} + \tilde{n}_{NS}$	
0	42	116	$n_{NS} := \int_{t_o}^{t_e} \dot{n}_{NS} \ dt + n^o_{NS}$	