

Equation assignment sequence for variable n

no	var	equ	quations	token
61	9	-	$S_{I,p} :: \text{port variable}$	
60	4	-	$F^{sink}_{N,I} :: \text{port variable}$	
59	198	-	$K^o_K :: \text{port variable}$	
58	197	-	$E^a_K :: \text{port variable}$	
57	122	-	$k^B :: \text{port variable}$	
56	121	-	$N^A :: \text{port variable}$	
55	109	-	$S_N :: \text{port variable}$	
54	132	-	$\lambda_S :: \text{port variable}$	
53	26	-	$N_{S,K} :: \text{port variable}$	
52	19	-	$A_{N,p,q} :: \text{port variable}$	
51	27	-	$I_{N,A} :: \text{port variable}$	
50	108	-	$U_N :: \text{port variable}$	
49	10	-	$S_{I,q} :: \text{port variable}$	
48	3	-	$F^{source}_{N,I} :: \text{port variable}$	
47	2	-	$F_{N,A} :: \text{port variable}$	
46	25	-	$r_{zN} :: \text{port variable}$	
45	24	-	$r_{yN} :: \text{port variable}$	
44	23	-	$r_{xN} :: \text{port variable}$	
43	101	-	$\# :: \text{port variable}$	

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no	var	equ	quations	token
42	1	-	$t :: \text{port variable}$	
41	164	101	$_x := F^{source}_{N,I} \star^N x_{N,S}$	
40	166	100	$_T := F^{source}_{N,I} \star^N T_N$	
39	165	98	$x := (F^{sink}_{N,I} \cdot _x_{I,S}) \star^I S_{I,p}$	
38	137	97	$m := \lambda_S \star^S n_{N,S}$	
37	167	93	$T := (F^{sink}_{N,I} \cdot _T_I) \star^I S_{I,p}$	
36	168	91	$f := x_{N,S,p}^{(N_{S,K})}$	
35	139	90	$n^t := \text{reduceSum}(n_{N,S}, S)$	
34	143	88	$\rho := (V_N)^{-1} \cdot m_N$	
33	199	84	$K := K^o_K \cdot \text{exp}((-E^a_K) \cdot (R \cdot T_{N,p})^{-1})$	
32	169	82	$\xi := \prod_S f_{N,S,K,p}$	
31	118	81	$v_x := \frac{\partial r_{xN}}{\partial t}$	
30	161	80	$\mu^o := \text{Instantiate}(\mu_{N,S}, \#)$	
29	140	78	$x := (n^t_N)^{-1} \cdot n_{N,S}$	
28	123	75	$R := N^A \cdot k^B$	
27	113	73	$T := \frac{\partial U_N}{\partial S_N}$	
26	189	71	$\rho := I_{N,A} \star^N \rho_N$	
25	183	69	$k^c_x := I_{N,A} \star^N \left(\left(\lambda_S \star^S (\mu_{N,S})^{-1} \right) \cdot (V_N)^{-1} \cdot \frac{\partial U_N}{\partial p_N} \cdot v_{xN} \right)$	
24	112	68	$p := \frac{\partial U_N}{\partial V_N}$	
23	157	67	$d := \text{sign} \left(F_{N,A} \star^N p_N \right)$	

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no	var	equ	quations	token
22	104	66	$0.5 := \mathbf{Instantiate}(\#, \#)$	
21	200	61	$\tilde{n} := A_{N,p,q} \overset{p}{\star} \left(N_{S,K} \overset{K}{\star} (K_{N,K,p} \cdot \xi_{N,K,p}) \right)$	
20	190	60	$\hat{k}_x^{d,Fick} := I_{N,A} \overset{N}{\star} \left(v_{xN} \cdot \frac{\partial U_N}{\partial \mu_{N,S}} \cdot (n_{N,S})^{-1} \right)$	
19	138	59	$c := (V_N)^{-1} \cdot n_{N,S}$	
18	180	56	$k_x^d := I_{N,A} \overset{N}{\star} \left((\mu_{N,S})^{-1} \cdot \left(v_{xN} \cdot \left((V_N)^{-1} \cdot \frac{\partial U_N}{\partial \mu_{N,S}} \right) \right) \right)$	
17	150	55	$A_{yz} := r_{yN} \cdot r_{zN}$	
16	114	53	$\mu := \frac{\partial U_N}{\partial n_{N,S}}$	
15	114	48	$\mu := \mu_{N,S}^o + R \cdot T_N \cdot \mathbf{ln}(x_{N,S})$	
14	159	44	$\hat{V} := (\rho_A)^{-1} \cdot k_{xA}^c \cdot A_{yzN} \cdot F_{N,A} \overset{N}{\star} p_N$	
13	158	41	$c := (0.5 \cdot (F_{N,A} - d_A \cdot F_{N,A})) \overset{N}{\star} c_{N,S}$	
12	201	38	$_np := \mathbf{reduceSum} \left(\left(\left(F_{N,I}^{source} \overset{N}{\star} \tilde{n}_{N,S,q} \right) \cdot S_{I,q} \right), q \right)$	
11	154	35	$\hat{n}_x^d := \hat{k}_x^{d,Fick} \cdot A_{yzN} \cdot F_{N,A} \overset{N}{\star} c_{N,S}$	
10	154	31	$\hat{n}_x^d := k_{xA,S}^d \cdot (A_{yzN} \cdot F_{N,A}) \overset{N}{\star} \mu_{N,S}$	
9	160	28	$\hat{n}_x^c := \hat{V}_A \cdot c_{A,S}$	
8	202	25	$\tilde{n} := F_{N,I}^{source} \overset{I}{\star} _np_{I,S}$	
7	195	23	$\dot{n}_x^d := F_{N,A} \overset{A}{\star} \hat{n}_{xA,S}^d$	
6	194	20	$\dot{n}_x^c := F_{N,A} \overset{A}{\star} \hat{n}_{xA,S}^c$	
5	110	16	$V := r_{xN} \cdot r_{yN} \cdot r_{zN}$	
4	203	15	$n^o := \mathbf{Instantiate}(n_{N,S}, \#)$	
3	196	10	$\dot{n} := \dot{n}_{xN,S}^c + \dot{n}_{xN,S}^d + V_N \cdot \tilde{n}_{N,S}$	

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no	var	equ	quations	token
2	106	9	$t^e := \mathbf{Instantiate}(t, \#)$	
1	105	7	$t^o := \mathbf{Instantiate}(t, \#)$	
0	111	1	$n := \int_{t^o}^{t^e} \dot{n}_{N,S} \, dt + n^o_{N,S}$	