

## Equation assignment sequence for variable $H$

no	var	equ	quations	token
74	95	-	$P_{NS,KS} :: \text{port variable}$	
73	101	-	$A^v_N :: \text{port variable}$	
72	20	-	$S_N :: \text{port variable}$	
71	105	-	$K^o_K :: \text{port variable}$	
70	13	-	$P_{N,NK} :: \text{port variable}$	
69	98	-	$N_{S,K} :: \text{port variable}$	
68	12	-	$P_{S,NS} :: \text{port variable}$	
67	11	-	$P_{K,NK} :: \text{port variable}$	
66	14	-	$P_{NK,KS} :: \text{port variable}$	
65	15	-	$r_{xN} :: \text{port variable}$	
64	40	-	$\lambda_S :: \text{port variable}$	
63	17	-	$r_{zN} :: \text{port variable}$	
62	16	-	$r_{yN} :: \text{port variable}$	
61	9	-	$P_{NS,AS} :: \text{port variable}$	
60	1	-	$F_{N,A} :: \text{port variable}$	
59	3	-	$\# :: \text{port variable}$	
58	21	-	$V_N :: \text{port variable}$	
57	19	-	$U_N :: \text{port variable}$	
56	2	-	$t :: \text{port variable}$	

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no	var	equ	quations	token
55	96	78	$c_{KS} := c_{NS} \overset{NS}{\star} P_{NS,KS}$	
54	27	11	$B_N := Set(S_N, \#)$	
53	97	79	$c_{KS} := c_{KS}$	
52	108	87	$c^o_{KS} := Set(c_{KS}, \#)$	
51	94	77	$T_{NK} := T_{NK}$	
50	104	84	$E_{a_{NK}} := Set(P_{N,NK} \overset{N}{\star} R_N \cdot T_{NK}, \#)$	
49	103	83	$P_{N,NK} := P_{N,NK}$	
48	102	82	$R_N := A^v_N \cdot B_N$	
47	23	8	$T_N := \frac{\partial U_N}{\partial S_N}$	
46	109	88	$\phi_{KS} := \prod (c_{KS} \cdot (c^o_{KS})^{-1})$	
45	106	85	$K_{NK} := K^o_K \odot exp((-E_{a_{NK}}) \cdot (R_N \overset{N}{\star} P_{N,NK} \cdot T_{NK})^{-1})$	
44	91	74	$T_{NK} := P_{N,NK} \overset{N}{\star} T_N$	
43	111	90	$N_{S,K} := N_{S,K}$	
42	110	89	$\phi_{KS} := \phi_{KS}$	
41	107	86	$K_{NK} := K_{NK}$	
40	113	92	$N_{NS,NK} := P_{S,NS} \overset{S}{\star} \left( (P_{K,NK} \cdot T_{NK} \cdot (T_{NK})^{-1}) \overset{K}{\star} N_{S,K} \right)$	
39	112	91	$\xi_{NK} := K_{NK} \cdot P_{NK,KS} \overset{KS}{\star} \phi_{KS}$	
38	61	44	$\lambda_S := \lambda_S$	
37	86	69	$\hat{n}_{NS}^c := F_{NS,AS} \overset{AS}{\star} \hat{n}_{AS}^c$	
36	129	108	$\hat{n}_{NS}^d := F_{NS,AS} \overset{AS}{\star} \hat{n}_{AS}^d$	

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no	var	equ	quations	token
35	114	93	$\tilde{n}_{NS} := V_N \odot \left( N_{NS,NK} \overset{NK}{\star} \xi_{NK} \right)$	
34	36	20	$v_{xN} := \frac{\partial r_{xN}}{\partial t}$	
33	81	64	$m_N := \lambda_S \overset{S \in NS}{\star} n_{NS}$	
32	49	32	$k_{xN}^c := \left( \lambda_S \overset{S \in NS}{\star} (\mu_{NS})^{-1} \right) \cdot (V_N)^{-1} \cdot \frac{\partial U_N}{\partial p_N} \cdot v_{xN}$	
31	137	118	$n_{NS}^o := Set(n_{NS}, \#)$	
30	132	111	$\dot{n}_{NS} := \hat{n}_{NS}^c + \hat{n}_{NS}^d + \tilde{n}_{NS}$	
29	53	36	$k_{xNS}^d := (\mu_{NS})^{-1} \cdot \left( v_{xN} \odot \left( (V_N)^{-1} \odot \frac{\partial U_N}{\partial \mu_{NS}} \right) \right)$	
28	79	62	$c_{NS} := (V_N)^{-1} \odot n_{NS}$	
27	78	61	$d_A := \text{sign} \left( F_{N,A} \overset{N}{\star} p_N \right)$	
26	6	3	$1/2 := Set(\#, \#)$	
25	82	65	$\rho_N := (V_N)^{-1} \cdot m_N$	
24	66	49	$k_{xN}^c := k_{xN}^c$	
23	18	119	$n_{NS} := \int_{t^o}^{t^e} \dot{n}_{NS} dt + n_{NS}^o$	
22	80	63	$A_{y,zN} := r_{yN} \cdot r_{zN}$	
21	70	53	$k_{xNS}^d := k_{xNS}^d$	
20	24	9	$\mu_{NS} := \frac{\partial U_N}{\partial n_{NS}}$	
19	84	67	$c_{AS} := (1/2 \cdot (F_{NS,AS} - d_A \odot  F_{NS,AS} )) \overset{NS}{\star} c_{NS}$	
18	83	66	$\hat{V}_A := (\rho_N)^{-1} \cdot k_{xN}^c \cdot A_{y,zN} \cdot F_{N,A} \overset{N}{\star} p_N$	
17	60	43	$h_{NS} := H_N \odot (n_{NS})^{-1}$	
16	128	107	$\hat{n}_{AS}^d := A_{y,zN} \odot \left( -k_{xNS}^d \right) \cdot F_{NS,AS} \overset{NS}{\star} \mu_{NS}$	

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no	var	equ	quations	token
15	85	68	$\hat{n}_{AS}^c := \hat{V}_A \odot c_{AS}$	
14	119	98	$h_{NS} := h_{NS}$	
13	10	6	$F_{NS,AS} := F_{N,A} \odot P_{NS,AS}$	
12	135	114	$\hat{w}_A := Set(\hat{H}_A^c, \#)$	
11	130	109	$\hat{H}_A^d := \left( F_{NS,AS} \overset{NS}{\star} h_{NS} \right) \overset{S \in AS}{\star} \hat{n}_{AS}^d$	
10	125	104	$\hat{H}_A^c := \left( F_{NS,AS} \overset{NS}{\star} h_{NS} \right) \overset{S \in AS}{\star} \hat{n}_{AS}^c$	
9	136	115	$\hat{w}_N := F_{N,A} \overset{A}{\star} \hat{w}_A$	
8	131	110	$\hat{H}_N^d := F_{N,A} \overset{A}{\star} \hat{H}_A^d$	
7	127	106	$\hat{H}_N^c := F_{N,A} \overset{A}{\star} \hat{H}_A^c$	
6	22	7	$p_N := \frac{\partial U_N}{\partial V_N}$	
5	59	42	$t^e := Set(t, t)$	
4	58	41	$t^o := Set(t, t)$	
3	138	120	$H^o_N := Set(H_N, \#)$	
2	133	116	$\dot{H}_N := \hat{H}_N^c + \hat{H}_N^d + \hat{w}_N$	
1	29	13	$H_N := U_N + p_N \cdot V_N$	
0	29	122	$H_N := \int_{t^o}^{t^e} \dot{H}_N dt + H^o_N$	