Equation assignment sequence for variable $\dot{x}y$

no	var	equ	quations	token
32	3	-	$\#$ :: port variable	
31	1	-	t :: port variable	
30	40	-	${K^{B,\delta}}_A$ :: port variable	
29	20	-	${M^{B,\delta}}_N$ :: port variable	
28	39	-	${K^{B,\gamma}}_A$ :: port variable	
27	19	-	${M^{B,\gamma}}_N$ :: port variable	
26	38	-	${K^{A,\beta}}_A$ :: port variable	
25	18	-	${M^{A,\beta}}_N$ :: port variable	
24	37	-	${K^{A,\alpha}}_A$ :: port variable	
23	17	-	${M^{A,\alpha}}_N$ :: port variable	
22	8	-	$F_{N,A}$ :: port variable	
21	36	-	$D_{N,A}$ :: port variable	
20	12	6	${y^o}_N := \text{Instantiate}(y_N, \#)$	
19	7	4	$t_e := \text{Instantiate}(t, \#)$	
18	6	3	$t_o := \text{Instantiate}(t, \#)$	
17	11	5	${x^o}_N := \text{Instantiate}(x_N, \#)$	
16	10	21	$y_N := \int_{t_o}^{t_e} \dot{y}_N \ dt + {y^o}_N$	
15	9	20	$x_N := \int_{t_o}^{t_e} \dot{x}_N \ dt + {x^o}_N$	
14	44	38	${k^{B,\delta}}_A := {K^{B,\delta}}_A$	

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no	var	equ	quations	token
13	24	10	$\pi^{B,\delta}{}_N := M^{B,\delta}{}_N \,.\, y_N$	
12	45	39	$k^{B,\gamma}{}_A := K^{B,\gamma}{}_A$	
11	23	9	$\pi^{B,\gamma}{}_N := M^{B,\gamma}{}_N \,.\, y_N$	
10	43	37	$k^{A,\beta}{}_A := K^{A,\beta}{}_A$	
9	22	8	$\pi^{A,\beta}{}_N := M^{A,\beta}{}_N \,.\, x_N$	
8	41	35	$k^{A,\alpha}{}_A := K^{A,\alpha}{}_A$	
7	21	7	$\pi^{A,\alpha}{}_N := M^{A,\alpha}{}_N \,.\, x_N$	
6	28	15	$\hat{y}^{B,\delta}{}_N := F_{N,A} \overset{A}{\star} \left(k^{B,\delta}{}_A \,.\, D_{N,A} \overset{N}{\star} \pi^{B,\delta}{}_N \right)$	
5	27	14	$\hat{y}^{B,\gamma}{}_N := F_{N,A} \overset{A}{\star} \left(k^{B,\gamma}{}_A \,.\, D_{N,A} \overset{N}{\star} \pi^{B,\gamma}{}_N \right)$	
4	26	12	$\hat{x}^{A,\beta}{}_N := F_{N,A} \overset{A}{\star} \left(k^{A,\beta}{}_A \,.\, D_{N,A} \overset{N}{\star} \pi^{A,\beta}{}_N \right)$	
3	25	11	$\hat{x}^{A,\alpha}{}_N := F_{N,A} \overset{A}{\star} \left(k^{A,\alpha}{}_A \,.\, D_{N,A} \overset{N}{\star} \pi^{A,\alpha}{}_N \right)$	
2	30	17	$\dot{y}_N := \hat{y}^{B,\gamma}{}_N + \hat{y}^{B,\delta}{}_N$	
1	29	16	$\dot{x}_N := \hat{x}^{A,\alpha}{}_N + \hat{x}^{A,\beta}{}_N$	
0	35	34	$\dot{x}\dot{y} := \mathrm{MixedStack}\left(\dot{x}_N, \dot{y}_N\right)$	