

Trace	Elementary Function	Current Value	Elemendary Function Derivative	∇_x Value	∇_y Value
v_1	x	x	\dot{x}		0
v_2	$w_{11}v_1$	$w_{11}x$	$w_{11}\dot{v}_1$		0
v_3	y	y	\dot{y}	0	
v_4	$w_{12}v_3$	$w_{12}y$	$w_{12}\dot{v}_3$	0	
v_5	$v_2 + v_4$	$w_{11}x + w_{12}y$	$\dot{v}_2 + \dot{v}_4$		
v_6	$z(v_5)$	$z(w_{11}x + w_{12}y)$	$z'(v_5)\dot{v}_5$		
v_7	$w_{\text{out},1}v_6$	$w_{\text{out},1}z(w_{11}x + w_{12}y)$	$w_{\text{out},1}\dot{v}_6$		
v_8	v_1	x	\dot{v}_1		
v_9	$w_{21}v_8$	$w_{21}x$	$w_{21}\dot{v}_8$		
v_{10}	v_3	y	\dot{v}_3		
v_{11}	$w_{22}v_{10}$	$w_{22}y$	$w_{22}\dot{v}_{10}$		
v_{12}	$v_9 + v_{11}$	$w_{21}x + w_{22}y$	$\dot{v}_9 + \dot{v}_{11}$		
v_{13}	$z(v_{12})$	$z(w_{21}x + w_{22}y)$	$z'(v_{12})\dot{v}_{12}$		
v_{14}	$w_{\text{out},2}v_{13}$	$w_{\text{out},2}z(w_{21}x + w_{22}y)$	$w_{\text{out},2}\dot{v}_{13}$		
v_{15}, f	$v_7 + v_{14}$	$w_{\text{out},1}z(w_{11}x + w_{12}y) + w_{\text{out},2}z(w_{21}x + w_{22}y)$	$\dot{v}_7 + \dot{v}_{14}$		