O
Memo add v_{48} v_{19} v_{93}

C
Memo multiply 1 0 v_{93}, Memo add 0 v_{47} v_{91}, Memo multiply 1 0 v_{47}, Memo add v_{91} v_{86} v_{92}, Unfold add v_{71} $((1 + v_{92}))$ v_{60}, Memo add v_{93} v_{60} v_{94}
[$v_{19} \to v_{93}$, $v_{48} \to 0$]

O
Memo multiply 1 0 v_{93}

C
Memo add 0 v_{47} v_{91}, Memo multiply 1 0 v_{47}, Memo add v_{91} v_{86} v_{92}, Unfold add v_{71} $((1 + v_{92}))$ v_{60}, Memo add 0 v_{60} v_{94}
[$v_{19} \to v_{93}$, $v_{48} \to 0$, $v_{93} \to 0$]

O
Memo add 0 v_{47} v_{91}

C
Memo multiply 1 0 v_{91}, Memo add v_{91} v_{86} v_{92}, Unfold add v_{71} $((1 + v_{92}))$ v_{60}, Memo add 0 v_{60} v_{94}
[$v_{19} \to v_{93}$, $v_{47} \to v_{91}$, $v_{48} \to 0$, $v_{93} \to 0$]

O
Memo multiply 1 0 v_{91}

C
Memo add 0 v_{86} v_{92}, Unfold add v_{71} $((1 + v_{92}))$ v_{60}, Memo add 0 v_{60} v_{94}
[$v_{19} \to v_{93}$, $v_{47} \to v_{91}$, $v_{48} \to 0$, $v_{91} \to 0$, $v_{93} \to 0$]

O
Memo add 0 v_{86} v_{92}

C
Unfold add v_{71} $((1 + v_{92}))$ v_{60}, Memo add 0 v_{60} v_{94}
[$v_{19} \to v_{93}$, $v_{47} \to v_{91}$, $v_{48} \to 0$, $v_{86} \to v_{92}$, $v_{91} \to 0$, $v_{93} \to 0$]

O
Memo add 0 v_{60} v_{94}

C
Unfold add v_{71} $((1 + v_{92}))$ v_{94}
[$v_{19} \to v_{93}$, $v_{47} \to v_{91}$, $v_{48} \to 0$, $v_{60} \to v_{94}$, $v_{86} \to v_{92}$, $v_{91} \to 0$, $v_{93} \to 0$]

Leaf
Unfold add v_{71} $((1 + v_{92}))$ v_{94}
[$v_{19} \to v_{93}$, $v_{47} \to v_{91}$, $v_{48} \to 0$, $v_{60} \to v_{94}$, $v_{86} \to v_{92}$, $v_{91} \to 0$, $v_{93} \to 0$]

C
Memo add v_{95} v_{19} v_{96}, Memo multiply $((2 + v_{95}))$ $((1 + v_{95}))$ v_{19}, Memo add $((1 + v_{95}))$ v_{47} v_{91}, Memo multiply $((2 + v_{95}))$ $((1 + v_{95}))$ v_{47}, Memo add v_{91} v_{86} v_{92}, Unfold add v_{71} $((1 + v_{92}))$ v_{60}, Memo add $((1 + v_{96}))$ v_{60} v_{94}
[$v_{48} \to (1 + v_{95})$, $v_{93} \to (1 + v_{96})$]

O
Memo multiply $((2 + v_{95}))$ $((1 + v_{95}))$ v_{19}

C
Memo add v_{97} v_{19} v_{96}, Unfold add $((2 + v_{97}))$ v_{98} v_{19}, Memo multiply $((2 + v_{97}))$ v_{97} v_{98}, Memo add $((1 + v_{97}))$ v_{47} v_{91}, Memo multiply $((2 + v_{97}))$ $((1 + v_{97}))$ v_{47}, Memo add v_{91} v_{86} v_{92}, Unfold add v_{71} $((1 + v_{92}))$ v_{60}, Memo add $((1 + v_{96}))$ v_{60} v_{94}
[$v_{48} \to (1 + v_{95})$, $v_{93} \to (1 + v_{96})$, $v_{95} \to v_{97}$]

O
Unfold add $((2 + v_{97}))$ v_{98} v_{19}

C
Memo add v_{97} $((1 + v_{100}))$ v_{96}, Memo add $((1 + v_{97}))$ v_{98} v_{100}, Memo multiply $((2 + v_{97}))$ v_{97} v_{98}, Memo add $((1 + v_{97}))$ v_{47} v_{91}, Memo multiply $((2 + v_{97}))$ $((1 + v_{97}))$ v_{47}, Memo add v_{91} v_{86} v_{92}, Unfold add v_{71} $((1 + v_{92}))$ v_{60}, Memo add $((1 + v_{96}))$ v_{60} v_{94}
[$v_{19} \to (1 + v_{100})$, $v_{48} \to (1 + v_{95})$, $v_{93} \to (1 + v_{96})$, $v_{95} \to v_{97}$, $v_{99} \to (1 + v_{97})$]

O
Memo add $((1 + v_{97}))$ v_{98} v_{100}

C
Memo add v_{101} $((2 + v_{102}))$ v_{96}, Memo add v_{101} v_{98} v_{102}, Memo multiply $((2 + v_{101}))$ v_{101} v_{98}, Memo add $((1 + v_{101}))$ v_{47} v_{91}, Memo multiply $((2 + v_{101}))$ $((1 + v_{101}))$ v_{47}, Memo add v_{91} v_{86} v_{92}, Unfold add v_{71} $((1 + v_{92}))$ v_{60}, Memo add $((1 + v_{96}))$ v_{60} v_{94}
[$v_{19} \to (1 + v_{100})$, $v_{48} \to (1 + v_{95})$, $v_{93} \to (1 + v_{96})$, $v_{95} \to v_{97}$, $v_{97} \to v_{101}$, $v_{99} \to (1 + v_{97})$, $v_{100} \to (1 + v_{102})$]

O
Memo add $((1 + v_{101}))$ v_{47} v_{91}

C
Memo add v_{103} $((2 + v_{102}))$ v_{96}, Memo add v_{103} v_{98} v_{102}, Memo multiply $((2 + v_{103}))$ v_{103} v_{98}, Memo add v_{103} v_{47} v_{104}, Memo multiply $((2 + v_{103}))$ $((1 + v_{103}))$ v_{47}, Memo add $((1 + v_{104}))$ v_{86} v_{92}, Unfold add v_{71} $((1 + v_{92}))$ v_{60}, Memo add $((1 + v_{96}))$ v_{60} v_{94}
[$v_{19} \to (1 + v_{100})$, $v_{48} \to (1 + v_{95})$, $v_{91} \to (1 + v_{104})$, $v_{93} \to (1 + v_{96})$, $v_{95} \to v_{97}$, $v_{97} \to v_{101}$, $v_{99} \to (1 + v_{97})$, $v_{100} \to (1 + v_{102})$, $v_{101} \to v_{103}$]

O
Memo multiply $((2 + v_{103}))$ $((1 + v_{103}))$ v_{47}

C
Memo add v_{105} $((2 + v_{102}))$ v_{96}, Memo add v_{105} v_{98} v_{102}, Memo multiply $((2 + v_{105}))$ v_{105} v_{98}, Memo add v_{105} v_{47} v_{104}, Unfold add $((2 + v_{105}))$ v_{106} v_{47}, Memo multiply $((2 + v_{105}))$ v_{105} v_{106}, Memo add $((1 + v_{104}))$ v_{86} v_{92}, Unfold add v_{71} $((1 + v_{92}))$ v_{60}, Memo add $((1 + v_{96}))$ v_{60} v_{94}
[$v_{19} \to (1 + v_{100})$, $v_{48} \to (1 + v_{95})$, $v_{91} \to (1 + v_{104})$, $v_{93} \to (1 + v_{96})$, $v_{95} \to v_{97}$, $v_{97} \to v_{101}$, $v_{99} \to (1 + v_{97})$, $v_{100} \to (1 + v_{102})$, $v_{101} \to v_{103}$, $v_{103} \to v_{105}$]

O
Unfold add $((2 + v_{105}))$ v_{106} v_{47}

C
Memo add v_{105} $((2 + v_{102}))$ v_{96}, Memo add v_{105} v_{98} v_{102}, Memo multiply $((2 + v_{105}))$ v_{105} v_{98}, Memo add v_{105} $((1 + v_{108}))$ v_{104}, Memo add $((1 + v_{105}))$ v_{106} v_{108}, Memo multiply $((2 + v_{105}))$ v_{105} v_{106}, Memo add $((1 + v_{104}))$ v_{86} v_{92}, Unfold add v_{71} $((1 + v_{92}))$ v_{60}, Memo add $((1 + v_{96}))$ v_{60} v_{94}
[$v_{19} \to (1 + v_{100})$, $v_{47} \to (1 + v_{108})$, $v_{48} \to (1 + v_{95})$, $v_{91} \to (1 + v_{104})$, $v_{93} \to (1 + v_{96})$, $v_{95} \to v_{97}$, $v_{97} \to v_{101}$, $v_{99} \to (1 + v_{97})$, $v_{100} \to (1 + v_{102})$, $v_{101} \to v_{103}$, $v_{103} \to v_{105}$, $v_{107} \to (1 + v_{105})$]

O
Memo add $((1 + v_{105}))$ v_{106} v_{108}

C
Memo add v_{109} $((2 + v_{102}))$ v_{96}, Memo add v_{109} v_{98} v_{102}, Memo multiply $((2 + v_{109}))$ v_{109} v_{98}, Memo add v_{109} $((2 + v_{110}))$ v_{104}, Memo add v_{109} v_{106} v_{110}, Memo multiply $((2 + v_{109}))$ v_{109} v_{106}, Memo add $((1 + v_{104}))$ v_{86} v_{92}, Unfold add v_{71} $((1 + v_{92}))$ v_{60}, Memo add $((1 + v_{96}))$ v_{60} v_{94}
[$v_{19} \to (1 + v_{100})$, $v_{47} \to (1 + v_{108})$, $v_{48} \to (1 + v_{95})$, $v_{91} \to (1 + v_{104})$, $v_{93} \to (1 + v_{96})$, $v_{95} \to v_{97}$, $v_{97} \to v_{101}$, $v_{99} \to (1 + v_{97})$, $v_{100} \to (1 + v_{102})$, $v_{101} \to v_{103}$, $v_{103} \to v_{105}$, $v_{105} \to v_{109}$, $v_{107} \to (1 + v_{105})$, $v_{108} \to (1 + v_{110})$]

O
Memo add $((1 + v_{104}))$ v_{86} v_{92}

C
Memo add v_{109} $((2 + v_{102}))$ v_{96}, Memo add v_{109} v_{98} v_{102}, Memo multiply $((2 + v_{109}))$ v_{109} v_{98}, Memo add v_{109} $((2 + v_{110}))$ v_{111}, Memo add v_{109} v_{106} v_{110}, Memo multiply $((2 + v_{109}))$ v_{109} v_{106}, Memo add v_{111} v_{86} v_{112}, Unfold add v_{71} $((2 + v_{112}))$ v_{60}, Memo add $((1 + v_{96}))$ v_{60} v_{94}
[$v_{19} \to (1 + v_{100})$, $v_{47} \to (1 + v_{108})$, $v_{48} \to (1 + v_{95})$, $v_{91} \to (1 + v_{104})$, $v_{92} \to (1 + v_{112})$, $v_{93} \to (1 + v_{96})$, $v_{95} \to v_{97}$, $v_{97} \to v_{101}$, $v_{99} \to (1 + v_{97})$, $v_{100} \to (1 + v_{102})$, $v_{101} \to v_{103}$, $v_{103} \to v_{105}$, $v_{104} \to v_{111}$, $v_{105} \to v_{109}$, $v_{107} \to (1 + v_{105})$, $v_{108} \to (1 + v_{110})$]

O
Memo add $((1 + v_{96}))$ v_{60} v_{94}

C
Memo add v_{109} $((2 + v_{102}))$ v_{113}, Memo add v_{109} v_{98} v_{102}, Memo multiply $((2 + v_{109}))$ v_{109} v_{98}, Memo add v_{109} $((2 + v_{110}))$ v_{111}, Memo add v_{109} v_{106} v_{110}, Memo multiply $((2 + v_{109}))$ v_{109} v_{106}, Memo add v_{111} v_{86} v_{112}, Unfold add v_{71} $((2 + v_{112}))$ v_{60}, Memo add v_{113} v_{60} v_{114}
[$v_{19} \to (1 + v_{100})$, $v_{47} \to (1 + v_{108})$, $v_{48} \to (1 + v_{95})$, $v_{91} \to (1 + v_{104})$, $v_{92} \to (1 + v_{112})$, $v_{93} \to (1 + v_{96})$, $v_{94} \to (1 + v_{114})$, $v_{95} \to v_{97}$, $v_{96} \to v_{113}$, $v_{97} \to v_{101}$, $v_{99} \to (1 + v_{97})$, $v_{100} \to (1 + v_{102})$, $v_{101} \to v_{103}$, $v_{103} \to v_{105}$, $v_{104} \to v_{111}$, $v_{105} \to v_{109}$, $v_{107} \to (1 + v_{105})$, $v_{108} \to (1 + v_{110})$]

Leaf
Memo add v_{109} $((2 + v_{102}))$ v_{113}, Memo add v_{109} v_{98} v_{102}, Memo multiply $((2 + v_{109}))$ v_{109} v_{98}, Memo add v_{109} $((2 + v_{110}))$ v_{111}, Memo add v_{109} v_{106} v_{110}, Memo multiply $((2 + v_{109}))$ v_{109} v_{106}, Memo add v_{111} v_{86} v_{112}, Unfold add v_{71} $((2 + v_{112}))$ v_{60}, Memo add v_{113} v_{60} v_{114}
[$v_{19} \to (1 + v_{100})$, $v_{47} \to (1 + v_{108})$, $v_{48} \to (1 + v_{95})$, $v_{91} \to (1 + v_{104})$, $v_{92} \to (1 + v_{112})$, $v_{93} \to (1 + v_{96})$, $v_{94} \to (1 + v_{114})$, $v_{95} \to v_{97}$, $v_{96} \to v_{113}$, $v_{97} \to v_{101}$, $v_{99} \to (1 + v_{97})$, $v_{100} \to (1 + v_{102})$, $v_{101} \to v_{103}$, $v_{103} \to v_{105}$, $v_{104} \to v_{111}$, $v_{105} \to v_{109}$, $v_{107} \to (1 + v_{105})$, $v_{108} \to (1 + v_{110})$]