

The values of FVe and fitness score of individuals in Generation 1 (on training set)

id	EFF	Experssion	FVe	fitness score				
				FMI	JC	PR	RR	SUMFs
1	EFF1-1	add(l2, 1)	9	6.732	5.588	7.069	4.834	24.223
2	EFF1-2	sub(abs(l3), pow(l3, l1))	0	0	0	0	0	0
3	EFF1-3	add(l4, l2)	0	0	0	0	0	0
4	EFF1-4	protectedDiv(l2, l1)	7	5.14	4.18	5.49	3.71	18.52
5	EFF1-5	sub(pow(l3, l1), l2)	27	20.049	16.614	21.4885	13.5595	71.711
6	EFF1-6	abs(abs(l3))	0	0	0	0	0	0
7	EFF1-7	add(l3, 1)	0	0	0	0	0	0
8	EFF1-8	protectedNeg(l3)	0	0	0	0	0	0
9	EFF1-9	sub(sub(l1, l2), pow(l3, l2))	15	10.909	8.801	11.16	6.666	37.536
10	EFF1-10	protectedDiv(1, 1)	0	0	0	0	0	0
11	EFF1-11	sub(add(l4, l2), add(l4, l4))	9	6.732	5.588	7.069	4.834	24.223
12	EFF1-12	protectedDiv(l3, l1)	0	0	0	0	0	0
13	EFF1-13	add(l1, l3)	0	0	0	0	0	0
14	EFF1-14	mul(l4, l1)	9	6.677	5.493	5.892	4.951	23.013
15	EFF1-15	mul(sub(l1, -1), pow(l1, l3))	0	0	0	0	0	0
16	EFF1-16	sub(l3, l2)	20	15.0765	12.5845	16.122	10.129	53.912
17	EFF1-17	add(1, -1)	0	0	0	0	0	0
18	EFF1-18	protectedNeg(add(l3, l3))	0	0	0	0	0	0
19	EFF1-19	pow(l2, l1)	16	12.555	10.7135	11.269	9.2565	43.794
20	EFF1-20	abs(l3)	0	0	0	0	0	0
21	EFF1-21	abs(l1)	0	0	0	0	0	0
22	EFF1-22	abs(l2)	9	6.732	5.588	7.069	4.834	24.223
23	EFF1-23	protectedDiv(abs(l1), protectedDiv(l4, l3))	17	12.394	10.132	12.792	7.998	43.316
24	EFF1-24	protectedNeg(-1)	0	0	0	0	0	0
25	EFF1-25	sub(l2, l4)	9	6.732	5.588	7.069	4.834	24.223
26	EFF1-26	sub(1, l2)	10	7.127	5.698	7.861	4.563	25.249
27	EFF1-27	sub(l2, -1)	9	6.732	5.588	7.069	4.834	24.223
28	EFF1-28	abs(sub(l3, -1))	0	0	0	0	0	0

29	EFF1-29	protectedNeg(l4)	9	6.732	5.588	7.069	4.834	24.223
30	EFF1-30	abs(l4)	10	7.127	5.698	7.861	4.563	25.249
31	EFF1-31	sub(-1, 1)	0	0	0	0	0	0
32	EFF1-32	mul(add(l1, l4), add(l2, -1))	12	9.0975	7.6495	8.8555	6.5645	32.167
33	EFF1-33	protectedNeg(l1)	0	0	0	0	0	0
34	EFF1-34	protectedNeg(-1)	0	0	0	0	0	0
35	EFF1-35	protectedNeg(l3)	0	0	0	0	0	0
36	EFF1-36	add(sub(l3, l1), mul(l3, 0))	0	0	0	0	0	0
37	EFF1-37	protectedNeg(pow(1, l3))	0	0	0	0	0	0
38	EFF1-38	protectedDiv(add(l3, l4), add(l3, l4))	12	10.03	9.0105	10.707	8.787	38.5345
39	EFF1-39	protectedNeg(l4)	9	6.732	5.588	7.069	4.834	24.223
40	EFF1-40	mul(protectedNeg(l3), protectedDiv(l3, l4))	11	7.863	6.328	8.661	5.101	27.953
41	EFF1-41	sub(l3, sub(l3, 1))	0	0	0	0	0	0
42	EFF1-42	mul(sub(-1, l4), protectedNeg(l1))	8	6.0435	5.02	6.0275	4.207	21.298
43	EFF1-43	sub(l2, l4)	9	6.732	5.588	7.069	4.834	24.223
44	EFF1-44	pow(1, l2)	0	0	0	0	0	0
45	EFF1-45	abs(l4)	10	7.127	5.698	7.861	4.563	25.249
46	EFF1-46	protectedDiv(pow(l3, l2), sub(l4, l3))	19	14.3965	12.0385	14.83	9.445	50.71
47	EFF1-47	mul(l4, l1)	9	6.677	5.493	5.892	4.951	23.013
48	EFF1-48	pow(pow(l1, l1), add(l1, 1))	0	0	0	0	0	0
49	EFF1-49	pow(0, l2)	10	7.127	5.698	7.861	4.563	25.249
50	EFF1-50	sub(l4, add(1, l4))	0	0	0	0	0	0
51	EFF1-51	pow(protectedNeg(1), add(l3, l1))	0	0	0	0	0	0
52	EFF1-52	sub(mul(l4, 0), abs(l4))	9	6.732	5.588	7.069	4.834	24.223
53	EFF1-53	abs(l4)	10	7.127	5.698	7.861	4.563	25.249
54	EFF1-54	pow(pow(l2, l2), l1)	0	0	0	0	0	0
55	EFF1-55	mul(l4, l3)	15	11.338	9.421	11.524	7.058	39.341
56	EFF1-56	abs(l2)	9	6.732	5.588	7.069	4.834	24.223
57	EFF1-57	abs(l2)	9	6.732	5.588	7.069	4.834	24.223
58	EFF1-58	mul(sub(l4, l3), mul(l1, 0))	0	0	0	0	0	0
59	EFF1-59	pow(sub(l1, l3), mul(l4, l4))	15	10.649	8.507	11.4195	6.6225	37.198
60	EFF1-60	abs(abs(l2))	9	6.732	5.588	7.069	4.834	24.223

61	EFF1-61	protectedDiv(protectedNeg(l3), pow(l3, l3))	0	0	0	0	0	0
62	EFF1-62	sub(l4, 0)	10	7.127	5.698	7.861	4.563	25.249
63	EFF1-63	pow(l1, l4)	14	10.108	8.212	11.183	6.362	35.865
64	EFF1-64	pow(0, l1)	0	0	0	0	0	0
65	EFF1-65	sub(l1, l1)	0	0	0	0	0	0
66	EFF1-66	pow(abs(l1), sub(l3, l2))	15	11.5535	9.8455	11.5625	8.332	41.2935
67	EFF1-67	abs(-1)	0	0	0	0	0	0
68	EFF1-68	protectedDiv(protectedDiv(l4, l2), pow(l3, l2))	10	7.127	5.698	7.861	4.563	25.249
69	EFF1-69	sub(l1, l2)	21	15.8065	13.1745	16.772	10.499	56.252
70	EFF1-70	mul(pow(l3, l2), abs(l4))	10	7.127	5.698	7.861	4.563	25.249
71	EFF1-71	abs(-1)	0	0	0	0	0	0
72	EFF1-72	protectedNeg(l2)	10	7.127	5.698	7.861	4.563	25.249
73	EFF1-73	pow(l3, l2)	13	9.719	8.0385	10.279	6.775	34.8115
74	EFF1-74	protectedNeg(l1)	0	0	0	0	0	0
75	EFF1-75	pow(l1, l2)	17	12.4425	10.113	12.584	6.9775	42.117
76	EFF1-76	pow(l3, l3)	0	0	0	0	0	0
77	EFF1-77	add(l1, l4)	21	15.8065	13.1745	16.772	10.499	56.252
78	EFF1-78	pow(l2, 1)	9	6.732	5.588	7.069	4.834	24.223
79	EFF1-79	mul(abs(l4), protectedNeg(l3))	17	12.0745	9.6415	12.7635	7.4395	41.919
80	EFF1-80	add(l3, l3)	0	0	0	0	0	0
81	EFF1-81	sub(pow(0, l2), l1)	20	15.0765	12.5845	16.122	10.129	53.912
82	EFF1-82	abs(l1)	0	0	0	0	0	0
83	EFF1-83	protectedNeg(abs(l4))	9	6.732	5.588	7.069	4.834	24.223
84	EFF1-84	sub(l1, 1)	0	0	0	0	0	0
85	EFF1-85	add(protectedDiv(l2, l4), add(l3, l1))	9	6.732	5.588	7.069	4.834	24.223
86	EFF1-86	abs(l3)	0	0	0	0	0	0
87	EFF1-87	abs(sub(l3, l4))	26	19.9575	17.0025	21.107	13.6895	71.7565
88	EFF1-88	protectedDiv(l2, l4)	9	6.732	5.588	7.069	4.834	24.223
89	EFF1-89	abs(l3)	0	0	0	0	0	0
90	EFF1-90	protectedNeg(l3)	0	0	0	0	0	0
91	EFF1-91	pow(add(l3, l3), pow(l2, l4))	13	9.719	8.0385	10.279	6.765	34.8015
92	EFF1-92	protectedDiv(l3, add(l2, l4))	0	0	0	0	0	0

93	EFF1-93	protectedDiv(abs(l3), mul(l4, l3))	12	8.919	7.3685	9.179	6.015	31.4815
94	EFF1-94	add(l2, l2)	9	6.732	5.588	7.069	4.834	24.223
95	EFF1-95	protectedDiv(l3, l4)	14	10.7075	9.0395	9.9855	7.7245	37.457
96	EFF1-96	mul(l2, l3)	14	10.409	8.5685	10.869	7.415	37.2615
97	EFF1-97	protectedDiv(pow(l4, l4), add(l4, l1))	27	20.4345	17.228	21.5035	13.588	72.754
98	EFF1-98	abs(l2)	9	6.732	5.588	7.069	4.834	24.223
99	EFF1-99	mul(protectedNeg(l3), l2)	15	11.106	9.0275	11.656	7.1565	38.946
100	EFF1-100	pow(abs(l2), abs(1))	9	6.732	5.588	7.069	4.834	24.223
101	EFF1-101	add(l4, l2)	0	0	0	0	0	0
102	EFF1-102	abs(sub(l1, l2))	20	15.0165	12.617	15.8535	10.8445	54.3315
103	EFF1-103	pow(protectedNeg(-1), protectedNeg(l4))	0	0	0	0	0	0
104	EFF1-104	protectedDiv(l3, 1)	0	0	0	0	0	0
105	EFF1-105	abs(l1)	0	0	0	0	0	0
106	EFF1-106	protectedDiv(protectedNeg(-1), protectedNeg(l2))	10	7.127	5.698	7.861	4.563	25.249
107	EFF1-107	sub(l1, l4)	24	18.3785	15.544	19.6685	13.0155	66.6065
108	EFF1-108	pow(add(-1, l1), sub(l1, l4))	23	17.456	14.779	18.6035	12.2525	63.091
109	EFF1-109	add(protectedNeg(l3), l1)	0	0	0	0	0	0
110	EFF1-110	abs(protectedDiv(-1, l4))	9	6.732	5.588	7.069	4.834	24.223
111	EFF1-111	add(mul(l2, 0), add(1, l3))	0	0	0	0	0	0
112	EFF1-112	add(add(l4, l1), abs(l2))	0	0	0	0	0	0
113	EFF1-113	protectedNeg(sub(l3, l3))	0	0	0	0	0	0
114	EFF1-114	abs(abs(1))	0	0	0	0	0	0
115	EFF1-115	abs(add(l2, 1))	9	6.732	5.588	7.069	4.834	24.223
116	EFF1-116	protectedDiv(mul(l2, l1), l1)	13	9.9015	8.318	8.586	6.939	33.7445
117	EFF1-117	pow(l2, l4)	9	6.732	5.588	7.069	4.834	24.223
118	EFF1-118	add(protectedDiv(-1, l3), mul(l3, l2))	13	10.0895	8.5935	9.9415	7.5235	36.148
119	EFF1-119	protectedDiv(add(l2, l2), mul(l1, -1))	14	10.23	8.3745	10.247	6.9675	35.819
120	EFF1-120	add(l4, pow(l3, l2))	16	11.831	9.7465	12.533	8.06	42.1705
121	EFF1-121	mul(pow(l1, l4), abs(l2))	9	6.732	5.588	7.069	4.834	24.223
122	EFF1-122	protectedNeg(0)	0	0	0	0	0	0
123	EFF1-123	protectedNeg(mul(l1, l2))	11	8.0295	6.5395	7.4095	5.6395	27.618
124	EFF1-124	mul(l1, -1)	0	0	0	0	0	0

125	EFF1-125	sub(l2, l4)	9	6.732	5.588	7.069	4.834	24.223
126	EFF1-126	protectedNeg(l1)	0	0	0	0	0	0
127	EFF1-127	protectedDiv(l1, l1)	0	0	0	0	0	0
128	EFF1-128	mul(protectedDiv(l4, 0), add(l1, l3))	18	14.532	12.538	11.781	11.013	49.864
129	EFF1-129	add(sub(l3, l2), protectedNeg(l1))	22	16.425	13.6215	17.504	10.9875	58.538
130	EFF1-130	abs(l3)	0	0	0	0	0	0
131	EFF1-131	pow(sub(l3, l2), protectedNeg(l4))	19	13.6145	10.9115	14.2935	8.3795	47.199
132	EFF1-132	protectedDiv(l3, l2)	10	7.14	5.719	7.844	4.587	25.29
133	EFF1-133	pow(l2, l3)	9	6.742	5.588	7.079	4.834	24.243
134	EFF1-134	sub(l3, -1)	0	0	0	0	0	0
135	EFF1-135	protectedNeg(l3)	0	0	0	0	0	0
136	EFF1-136	protectedDiv(pow(l4, l4), mul(1, l1))	0	0	0	0	0	0
137	EFF1-137	abs(protectedNeg(l2))	9	6.732	5.588	7.069	4.834	24.223
138	EFF1-138	protectedDiv(protectedNeg(l4), protectedDiv(-1, l4))	10	7.127	5.698	7.861	4.563	25.249
139	EFF1-139	pow(l4, -1)	9	6.732	5.588	7.069	4.834	24.223
140	EFF1-140	sub(l2, l3)	24	18.3785	15.544	19.6685	13.0155	66.6065
141	EFF1-141	protectedNeg(l2)	10	7.127	5.698	7.861	4.563	25.249
142	EFF1-142	pow(l3, l4)	14	10.618	8.841	10.844	6.668	36.971
143	EFF1-143	abs(l4)	10	7.127	5.698	7.861	4.563	25.249
144	EFF1-144	protectedNeg(mul(l2, 1))	10	7.127	5.698	7.861	4.563	25.249
145	EFF1-145	pow(protectedDiv(l3, l4), l3)	17	13.1835	11.2395	12.4655	9.5325	46.421
146	EFF1-146	pow(pow(l3, l1), sub(-1, l4))	9	7.241	6.307	6.716	6.191	26.455
147	EFF1-147	add(sub(l1, l4), mul(l2, l1))	13	9.6915	8.091	10.324	6.633	34.7395
148	EFF1-148	sub(0, l1)	0	0	0	0	0	0
149	EFF1-149	protectedNeg(l4)	9	6.732	5.588	7.069	4.834	24.223
150	EFF1-150	pow(l3, l3)	0	0	0	0	0	0
151	EFF1-151	protectedDiv(protectedNeg(l4), abs(l2))	9	6.732	5.588	7.069	4.834	24.223
152	EFF1-152	pow(add(l1, l1), l4)	13	9.548	7.807	10.526	6.016	33.897
153	EFF1-153	protectedDiv(-1, l3)	0	0	0	0	0	0
154	EFF1-154	add(l3, l1)	0	0	0	0	0	0
155	EFF1-155	protectedDiv(l3, 1)	0	0	0	0	0	0
156	EFF1-156	protectedDiv(l1, l1)	0	0	0	0	0	0

157	EFF1-157	add(l4, l2)	0	0	0	0	0	0
158	EFF1-158	mul(l3, -1)	0	0	0	0	0	0
159	EFF1-159	pow(protectedDiv(l4, l2), pow(0, l4))	10	7.127	5.698	7.861	4.563	25.249
160	EFF1-160	mul(pow(l2, l2), l4)	10	7.127	5.698	7.861	4.563	25.249

The values of FVe and fitness score of individuals in Generation 2 (on training set)

id	EFF	Experssion	FVe	fitness score				
				FMI	JC	PR	RR	SUMFs
1	EFF2-1	sub(l4, 0)	10	7.127	5.698	7.861	4.563	25.249
2	EFF2-2	sub(pow(0, l2), l1)	20	15.0765	12.5845	16.122	10.129	53.912
3	EFF2-3	pow(abs(l2), l4)	9	6.732	5.588	7.069	4.834	24.223
4	EFF2-4	mul(add(l1, sub(-1, l4)), add(l2, -1))	17	12.279	9.9255	13.0495	7.6705	42.9245
5	EFF2-5	sub(add(l4, l2), add(l4, l4))	9	6.732	5.588	7.069	4.834	24.223
6	EFF2-6	protectedDiv(protectedNeg(l4), abs(l2))	9	6.732	5.588	7.069	4.834	24.223
7	EFF2-7	pow(l4, l4)	0	0	0	0	0	0
8	EFF2-8	protectedDiv(protectedDiv(l2, l4), l4)	9	6.732	5.588	7.069	4.834	24.223
9	EFF2-9	pow(protectedDiv(l4, l2), pow(0, l4))	10	7.127	5.698	7.861	4.563	25.249
10	EFF2-10	pow(l1, l2)	17	12.4425	10.113	12.584	6.9775	42.117
11	EFF2-11	protectedNeg(l4)	9	6.732	5.588	7.069	4.834	24.223
12	EFF2-12	abs(add(l2, 1))	9	6.732	5.588	7.069	4.834	24.223
13	EFF2-13	protectedDiv(add(l3, l4), sub(l4, l3))	15	11.4435	9.6895	10.4755	8.5525	40.161
14	EFF2-14	mul(protectedNeg(l3), protectedDiv(l3, l4))	11	7.863	6.328	8.661	5.101	27.953
15	EFF2-15	sub(l4, l2)	10	7.127	5.698	7.861	4.563	25.249
16	EFF2-16	pow(add(l1, l1), l4)	13	9.548	7.807	10.526	6.016	33.897
17	EFF2-17	mul(protectedNeg(l3), l2)	15	11.106	9.0275	11.656	7.1565	38.946
18	EFF2-18	pow(l3, l1)	0	0	0	0	0	0
19	EFF2-19	pow(0, l2)	10	7.127	5.698	7.861	4.563	25.249
20	EFF2-20	protectedNeg(l3)	0	0	0	0	0	0
21	EFF2-21	sub(-1, l4)	9	6.732	5.588	7.069	4.834	24.223
22	EFF2-22	sub(pow(l3, l2), l2)	16	11.831	9.7465	12.533	8.06	42.1705
23	EFF2-23	sub(l4, l3)	21	15.8065	13.1745	16.772	10.499	56.252
24	EFF2-24	protectedDiv(pow(l4, -1), add(l4, l1))	12	9.0975	7.6495	8.8555	6.5645	32.167
25	EFF2-25	protectedDiv(abs(l3), mul(l4, l3))	12	8.919	7.3685	9.179	6.015	31.4815
26	EFF2-26	mul(pow(l2, l2), l4)	10	7.127	5.698	7.861	4.563	25.249
27	EFF2-27	protectedNeg(abs(l4))	9	6.732	5.588	7.069	4.834	24.223
28	EFF2-28	mul(abs(l2), protectedNeg(l3))	15	11.106	9.0275	11.656	7.1565	38.946

29	EFF2-29	sub(sub(l1, l2), pow(l2, l2))	21	15.8065	13.1745	16.772	10.499	56.252
30	EFF2-30	sub(l3, l2)	20	15.0765	12.5845	16.122	10.129	53.912
31	EFF2-31	pow(0, l3)	0	0	0	0	0	0
32	EFF2-32	pow(l1, l2)	17	12.4425	10.113	12.584	6.9775	42.117
33	EFF2-33	add(l4, 1)	10	7.127	5.698	7.861	4.563	25.249
34	EFF2-34	mul(pow(l1, l4), abs(l2))	9	6.732	5.588	7.069	4.834	24.223
35	EFF2-35	abs(l2)	9	6.732	5.588	7.069	4.834	24.223
36	EFF2-36	pow(l2, l1)	16	12.555	10.7135	11.269	9.2565	43.794
37	EFF2-37	mul(protectedDiv(l4, 0), protectedNeg(l4))	18	14.532	12.538	11.781	11.013	49.864
38	EFF2-38	protectedNeg(mul(l1, l2))	11	8.0295	6.5395	7.4095	5.6395	27.618
39	EFF2-39	protectedDiv(l3, l2)	10	7.14	5.719	7.844	4.587	25.29
40	EFF2-40	pow(protectedDiv(add(l1, l1), l4), l3)	16	11.484	9.3745	12.054	7.1225	40.035
41	EFF2-41	abs(sub(l3, l3))	0	0	0	0	0	0
42	EFF2-42	add(sub(l1, l4), add(l3, l1))	24	18.3785	15.544	19.6685	13.0155	66.6065
43	EFF2-43	sub(l2, l4)	9	6.732	5.588	7.069	4.834	24.223
44	EFF2-44	abs(l4)	10	7.127	5.698	7.861	4.563	25.249
45	EFF2-45	sub(sub(0, l2), l4)	0	0	0	0	0	0
46	EFF2-46	mul(protectedNeg(l3), protectedDiv(l3, l4))	11	7.863	6.328	8.661	5.101	27.953
47	EFF2-47	mul(protectedNeg(l3), l2)	15	11.106	9.0275	11.656	7.1565	38.946
48	EFF2-48	protectedNeg(abs(l2))	10	7.127	5.698	7.861	4.563	25.249
49	EFF2-49	add(protectedNeg(-1), 1)	0	0	0	0	0	0
50	EFF2-50	pow(l4, -1)	9	6.732	5.588	7.069	4.834	24.223
51	EFF2-51	mul(pow(l3, l3), abs(l4))	13	9.678	7.941	9.484	5.838	32.941
52	EFF2-52	protectedDiv(pow(l3, l2), sub(l4, l3))	19	14.3965	12.0385	14.83	9.445	50.71
53	EFF2-53	pow(protectedDiv(l3, sub(pow(l4, l3), protectedNeg(l1))), l3)	31	23.422	19.548	24.783	16.257	84.01
54	EFF2-54	mul(pow(l1, l4), abs(protectedNeg(l3)))	14	9.982	7.9955	10.6525	6.257	34.887
55	EFF2-55	pow(add(l1, l4), l4)	9	6.677	5.493	5.892	4.951	23.013
56	EFF2-56	abs(sub(l4, l2))	0	0	0	0	0	0
57	EFF2-57	sub(pow(l3, l1), l2)	27	20.049	16.614	21.4885	13.5595	71.711
58	EFF2-58	add(0, l2)	9	6.732	5.588	7.069	4.834	24.223
59	EFF2-59	pow(l3, l2)	13	9.719	8.0385	10.279	6.775	34.8115



60	EFF2-60	pow(l2, l1)	16	12.555	10.7135	11.269	9.2565	43.794
61	EFF2-61	mul(add(l1, l4), add(1, -1))	0	0	0	0	0	0
62	EFF2-62	sub(sub(l3, l4), -1)	27	20.4345	17.228	21.5035	13.588	72.754
63	EFF2-63	add(sub(l1, l4), mul(l2, l1))	13	9.6915	8.091	10.324	6.633	34.7395
64	EFF2-64	pow(abs(l2), abs(1))	9	6.732	5.588	7.069	4.834	24.223
65	EFF2-65	mul(protectedDiv(l4, 0), add(l1, l3))	18	14.532	12.538	11.781	11.013	49.864
66	EFF2-66	pow(0, l3)	0	0	0	0	0	0
67	EFF2-67	sub(mul(l4, 0), l4)	9	6.732	5.588	7.069	4.834	24.223
68	EFF2-68	protectedNeg(-1)	0	0	0	0	0	0
69	EFF2-69	protectedDiv(add(1, l4), add(l3, l4))	14	10.243	8.27	10.485	6.333	35.331
70	EFF2-70	protectedDiv(l3, sub(pow(0, 1), mul(l4, l4)))	16	11.2645	8.9415	11.9435	6.8095	38.959
71	EFF2-71	pow(sub(l1, l3), mul(l4, l4))	15	10.649	8.507	11.4195	6.6225	37.198
72	EFF2-72	pow(sub(l3, l2), protectedNeg(l4))	19	13.6145	10.9115	14.2935	8.3795	47.199
73	EFF2-73	protectedNeg(mul(l2, 1))	10	7.127	5.698	7.861	4.563	25.249
74	EFF2-74	protectedNeg(l3)	0	0	0	0	0	0
75	EFF2-75	mul(protectedDiv(l4, 0), add(l1, l3))	18	14.532	12.538	11.781	11.013	49.864
76	EFF2-76	protectedDiv(l2, l2)	17	12.2405	10.0005	13.0075	7.572	42.8205
77	EFF2-77	add(l1, l1)	0	0	0	0	0	0
78	EFF2-78	sub(sub(l1, l2), pow(l3, l2))	15	10.909	8.801	11.16	6.666	37.536
79	EFF2-79	add(protectedDiv(-1, l3), mul(l3, l2))	13	10.0895	8.5935	9.9415	7.5235	36.148
80	EFF2-80	protectedNeg(l3)	0	0	0	0	0	0
81	EFF2-81	pow(pow(l3, l2), l3)	14	10.4195	8.615	10.713	7.232	36.9795
82	EFF2-82	mul(add(l1, l4), l2)	13	9.8535	8.2205	8.5755	7.0365	33.686
83	EFF2-83	protectedDiv(protectedNeg(l4), protectedDiv(-1, l1))	9	6.677	5.493	5.892	4.951	23.013
84	EFF2-84	mul(protectedDiv(protectedDiv(-1, l3), 0), add(l1, l3))	0	0	0	0	0	0
85	EFF2-85	add(sub(l1, l4), mul(l2, l1))	13	9.6915	8.091	10.324	6.633	34.7395
86	EFF2-86	sub(sub(l3, l2), pow(l3, l2))	15	11.338	9.421	11.524	7.058	39.341
87	EFF2-87	pow(add(l1, l4), l4)	9	6.677	5.493	5.892	4.951	23.013
88	EFF2-88	abs(l2)	9	6.732	5.588	7.069	4.834	24.223
89	EFF2-89	mul(protectedNeg(sub(l1, l4)), l2)	11	8.0295	6.5395	7.4095	5.6395	27.618
90	EFF2-90	pow(add(l2, 1), l4)	0	0	0	0	0	0
91	EFF2-91	add(l4, pow(l3, sub(-1, l4)))	13	9.54	7.799	9.984	6.237	33.56

92	EFF2-92	protectedDiv(add(l3, sub(l3, l2)), add(l3, l4))	9	6.965	5.9285	6.634	5.041	24.5685
93	EFF2-93	sub(1, l2)	10	7.127	5.698	7.861	4.563	25.249
94	EFF2-94	sub(l4, l2)	10	7.127	5.698	7.861	4.563	25.249
95	EFF2-95	sub(l2, l3)	24	18.3785	15.544	19.6685	13.0155	66.6065
96	EFF2-96	protectedDiv(l2, l4)	9	6.732	5.588	7.069	4.834	24.223
97	EFF2-97	pow(add(l1, l1), l2)	17	12.4145	10.0595	12.3115	6.9165	41.702
98	EFF2-98	pow(pow(l3, l1), sub(l3, l4))	34	26.3665	22.6475	27.5155	21.132	97.6615
99	EFF2-99	sub(pow(0, l2), l1)	20	15.0765	12.5845	16.122	10.129	53.912
100	EFF2-100	pow(add(-1, -1), sub(l1, l4))	17	13.2005	11.2295	11.7405	9.515	45.6855
101	EFF2-101	sub(l2, l4)	9	6.732	5.588	7.069	4.834	24.223
102	EFF2-102	mul(protectedNeg(l2), protectedDiv(l3, l4))	10	7.127	5.698	7.861	4.563	25.249
103	EFF2-103	sub(l3, l3)	0	0	0	0	0	0
104	EFF2-104	sub(pow(l2, l2), l1)	0	0	0	0	0	0
105	EFF2-105	mul(protectedNeg(l4), protectedDiv(l3, l4))	13	9.471	7.617	9.2285	5.209	31.5255
106	EFF2-106	protectedDiv(mul(l2, l4), l1)	0	0	0	0	0	0
107	EFF2-107	protectedNeg(mul(l1, l2))	11	8.0295	6.5395	7.4095	5.6395	27.618
108	EFF2-108	pow(add(-1, l1), sub(l1, l1))	0	0	0	0	0	0
109	EFF2-109	abs(sub(l1, l2))	20	15.0165	12.617	15.8535	10.8445	54.3315
110	EFF2-110	sub(l2, -1)	9	6.732	5.588	7.069	4.834	24.223
111	EFF2-111	add(l2, l2)	9	6.732	5.588	7.069	4.834	24.223
112	EFF2-112	protectedNeg(mul(l2, add(l1, l3)))	10	7.127	5.698	7.861	4.563	25.249
113	EFF2-113	sub(l3, l2)	20	15.0765	12.5845	16.122	10.129	53.912
114	EFF2-114	mul(pow(l3, l1), abs(l4))	10	7.217	5.834	7.863	4.778	25.692
115	EFF2-115	mul(sub(-1, l1), protectedNeg(l1))	0	0	0	0	0	0
116	EFF2-116	pow(l3, l3)	0	0	0	0	0	0
117	EFF2-117	mul(pow(l3, l3), abs(l4))	13	9.678	7.941	9.484	5.838	32.941
118	EFF2-118	sub(l3, protectedDiv(l1, l4))	16	12.793	11.1455	11.928	8.8305	44.697
119	EFF2-119	mul(l3, l1)	0	0	0	0	0	0
120	EFF2-120	sub(protectedDiv(l4, l2), l2)	10	7.127	5.698	7.861	4.563	25.249
121	EFF2-121	pow(l1, l2)	17	12.4425	10.113	12.584	6.9775	42.117
122	EFF2-122	pow(l4, l2)	10	7.127	5.698	7.861	4.563	25.249
123	EFF2-123	sub(l4, -1)	10	7.127	5.698	7.861	4.563	25.249

124	EFF2-124	abs(l3)	0	0	0	0	0	0
125	EFF2-125	abs(abs(l2))	9	6.732	5.588	7.069	4.834	24.223
126	EFF2-126	protectedDiv(mul(l2, l1), l1)	13	9.9015	8.318	8.586	6.939	33.7445
127	EFF2-127	add(sub(l3, l2), protectedNeg(l4))	0	0	0	0	0	0
128	EFF2-128	mul(l4, abs(l2))	0	0	0	0	0	0
129	EFF2-129	pow(sub(protectedDiv(protectedNeg(l1), sub(l2, l2)), l2), protectedNeg(l4))	15	10.6175	8.462	11.206	6.616	36.9015
130	EFF2-130	add(protectedDiv(-1, l3), mul(l3, l2))	13	10.0895	8.5935	9.9415	7.5235	36.148
131	EFF2-131	protectedDiv(l3, l2)	10	7.14	5.719	7.844	4.587	25.29
132	EFF2-132	mul(protectedNeg(l3), l1)	0	0	0	0	0	0
133	EFF2-133	pow(pow(l3, l1), sub(-1, l4))	9	7.241	6.307	6.716	6.191	26.455
134	EFF2-134	add(protectedDiv(l2, l1), add(l3, l1))	7	5.14	4.18	5.49	3.71	18.52
135	EFF2-135	pow(sub(l3, l2), l4)	14	10.618	8.841	10.844	6.668	36.971
136	EFF2-136	protectedDiv(l3, l1)	0	0	0	0	0	0
137	EFF2-137	abs(protectedDiv(-1, l4))	9	6.732	5.588	7.069	4.834	24.223
138	EFF2-138	abs(protectedNeg(l2))	9	6.732	5.588	7.069	4.834	24.223
139	EFF2-139	pow(add(-1, l1), sub(l1, l4))	23	17.456	14.779	18.6035	12.2525	63.091
140	EFF2-140	pow(add(l3, l3), pow(l3, l4))	15	10.832	8.712	11.134	6.634	37.312
141	EFF2-141	sub(add(protectedNeg(l4), mul(-1, -1)), -1)	9	6.732	5.588	7.069	4.834	24.223
142	EFF2-142	protectedDiv(add(l2, l2), mul(abs(l4), -1))	10	7.127	5.698	7.861	4.563	25.249
143	EFF2-143	pow(add(l2, l3), pow(l2, l4))	14	10.409	8.5685	10.869	7.415	37.2615
144	EFF2-144	mul(l4, l3)	15	11.338	9.421	11.524	7.058	39.341
145	EFF2-145	sub(mul(l4, 0), protectedNeg(-1))	0	0	0	0	0	0
146	EFF2-146	protectedDiv(protectedNeg(l4), abs(l2))	9	6.732	5.588	7.069	4.834	24.223
147	EFF2-147	pow(add(l3, l3), pow(l2, mul(protectedNeg(l2), add(l2, 1))))	0	0	0	0	0	0
148	EFF2-148	protectedDiv(pow(l3, l2), sub(l4, l3))	19	14.3965	12.0385	14.83	9.445	50.71
149	EFF2-149	abs(l2)	9	6.732	5.588	7.069	4.834	24.223
150	EFF2-150	protectedDiv(l3, l4)	14	10.7075	9.0395	9.9855	7.7245	37.457
151	EFF2-151	pow(sub(l2, l3), mul(l4, l4))	17	12.0745	9.6415	12.7635	7.4395	41.919
152	EFF2-152	sub(l2, pow(l3, l2))	15	11.106	9.0275	11.656	7.1565	38.946
153	EFF2-153	protectedNeg(l4)	9	6.732	5.588	7.069	4.834	24.223

154	EFF2-154	pow(l4, -1)	9	6.732	5.588	7.069	4.834	24.223
155	EFF2-155	abs(add(l2, 1))	9	6.732	5.588	7.069	4.834	24.223
156	EFF2-156	mul(add(l1, l4), add(l2, -1))	12	9.0975	7.6495	8.8555	6.5645	32.167
157	EFF2-157	add(sub(l3, protectedDiv(l2, l4)), protectedNeg(l1))	14	10.618	8.841	10.844	6.668	36.971
158	EFF2-158	pow(l2, l4)	9	6.732	5.588	7.069	4.834	24.223
159	EFF2-159	protectedNeg(l4)	9	6.732	5.588	7.069	4.834	24.223
160	EFF2-160	add(sub(l3, l2), protectedNeg(l1))	22	16.425	13.6215	17.504	10.9875	58.538

The values of FVe and fitness score of individuals in Generation 3 (on training set)

id	EFF	Experssion	FVe	fitness score				
				FMI	JC	PR	RR	SUMFs
1	EFF3-1	mul(pow(l3, l2), abs(l3))	12	9.153	7.6805	8.8075	6.739	32.38
2	EFF3-2	sub(sub(l1, l4), l2)	0	0	0	0	0	0
3	EFF3-3	add(l2, l2)	9	6.732	5.588	7.069	4.834	24.223
4	EFF3-4	sub(pow(0, l2), protectedNeg(l4))	10	7.127	5.698	7.861	4.563	25.249
5	EFF3-5	pow(l3, abs(1))	0	0	0	0	0	0
6	EFF3-6	protectedNeg(mul(l1, l2))	11	8.0295	6.5395	7.4095	5.6395	27.618
7	EFF3-7	sub(l1, l2)	21	15.8065	13.1745	16.772	10.499	56.252
8	EFF3-8	pow(l2, l3)	9	6.742	5.588	7.079	4.834	24.243
9	EFF3-9	pow(add(l1, sub(sub(1, l4), sub(l2, l1))), l4)	13	9.548	7.807	10.526	6.016	33.897
10	EFF3-10	protectedDiv(abs(l1), protectedDiv(l4, l3))	17	12.394	10.132	12.792	7.998	43.316
11	EFF3-11	protectedDiv(add(l3, l4), add(l3, l4))	12	10.03	9.0105	10.707	8.787	38.5345
12	EFF3-12	pow(add(l3, l3), 1)	0	0	0	0	0	0
13	EFF3-13	protectedDiv(abs(l3), mul(l4, l1))	13	9.7525	8.0635	9.056	6.932	33.804
14	EFF3-14	mul(sub(-1, l4), l2)	10	7.127	5.698	7.861	4.563	25.249
15	EFF3-15	sub(pow(l3, l2), l2)	16	11.831	9.7465	12.533	8.06	42.1705
16	EFF3-16	protectedDiv(l2, l2)	17	12.2405	10.0005	13.0075	7.572	42.8205
17	EFF3-17	pow(abs(l2), sub(l1, l4))	16	11.4205	9.1825	12.3115	7.2835	40.198
18	EFF3-18	pow(l2, l3)	9	6.742	5.588	7.079	4.834	24.243
19	EFF3-19	protectedDiv(protectedNeg(l4), protectedNeg(l2))	9	6.732	5.588	7.069	4.834	24.223
20	EFF3-20	abs(protectedNeg(pow(0, l2)))	10	7.127	5.698	7.861	4.563	25.249
21	EFF3-21	protectedDiv(mul(l2, l1), abs(l2))	7	4.7785	3.756	4.85	2.784	16.1685
22	EFF3-22	pow(abs(l1), sub(l3, l2))	15	11.5535	9.8455	11.5625	8.332	41.2935
23	EFF3-23	abs(l2)	9	6.732	5.588	7.069	4.834	24.223
24	EFF3-24	protectedNeg(l1)	0	0	0	0	0	0
25	EFF3-25	protectedDiv(add(l2, l4), mul(l1, -1))	0	0	0	0	0	0
26	EFF3-26	l2	9	6.732	5.588	7.069	4.834	24.223
27	EFF3-27	add(l2, 1)	9	6.732	5.588	7.069	4.834	24.223
28	EFF3-28	sub(l1, l4)	24	18.3785	15.544	19.6685	13.0155	66.6065
29	EFF3-29	abs(sub(l3, l3))	0	0	0	0	0	0

30	EFF3-30	abs(protectedDiv(abs(l2), protectedDiv(l1, l2)))	7	5.14	4.18	5.49	3.71	18.52
31	EFF3-31	pow(l1, -1)	0	0	0	0	0	0
32	EFF3-32	protectedDiv(abs(l3), l2)	10	7.14	5.719	7.844	4.587	25.29
33	EFF3-33	pow(add(l3, l3), pow(l2, l1))	13	10.2705	8.776	8.3305	7.36	34.737
34	EFF3-34	sub(pow(l3, l1), -1)	0	0	0	0	0	0
35	EFF3-35	abs(protectedNeg(protectedNeg(l1)))	0	0	0	0	0	0
36	EFF3-36	add(sub(l1, l1), mul(l2, l1))	13	9.8535	8.2205	8.5755	7.0365	33.686
37	EFF3-37	abs(sub(abs(mul(l4, 1)), l4))	0	0	0	0	0	0
38	EFF3-38	pow(abs(l4), mul(l4, l4))	0	0	0	0	0	0
39	EFF3-39	protectedDiv(abs(l1), protectedDiv(l4, l4))	13	9.471	7.617	9.2285	5.209	31.5255
40	EFF3-40	add(l3, 1)	0	0	0	0	0	0
41	EFF3-41	protectedDiv(mul(l4, l1), l1)	16	11.655	9.423	11.2565	8.107	40.4415
42	EFF3-42	sub(pow(l3, l1), l2)	27	20.049	16.614	21.4885	13.5595	71.711
43	EFF3-43	mul(protectedNeg(l3), protectedDiv(l3, l2))	19	14.244	11.8035	12.1445	9.8135	48.0055
44	EFF3-44	add(l2, 1)	9	6.732	5.588	7.069	4.834	24.223
45	EFF3-45	pow(add(l1, l1), l4)	13	9.548	7.807	10.526	6.016	33.897
46	EFF3-46	pow(add(l1, l1), 0)	0	0	0	0	0	0
47	EFF3-47	protectedDiv(l2, l2)	17	12.2405	10.0005	13.0075	7.572	42.8205
48	EFF3-48	sub(l4, 0)	10	7.127	5.698	7.861	4.563	25.249
49	EFF3-49	mul(l1, l1)	0	0	0	0	0	0
50	EFF3-50	pow(add(l3, l3), pow(l2, l4))	13	9.719	8.0385	10.279	6.765	34.8015
51	EFF3-51	sub(l2, l4)	9	6.732	5.588	7.069	4.834	24.223
52	EFF3-52	pow(l3, l3)	0	0	0	0	0	0
53	EFF3-53	protectedDiv(protectedNeg(l4), l1)	16	11.4455	9.1465	12.1175	7.1615	39.871
54	EFF3-54	sub(sub(l1, l2), pow(l3, l2))	15	10.909	8.801	11.16	6.666	37.536
55	EFF3-55	protectedNeg(l4)	9	6.732	5.588	7.069	4.834	24.223
56	EFF3-56	mul(l1, protectedDiv(l3, l4))	17	12.394	10.132	12.792	7.998	43.316
57	EFF3-57	abs(protectedNeg(l3))	0	0	0	0	0	0
58	EFF3-58	pow(abs(l2), abs(1))	9	6.732	5.588	7.069	4.834	24.223
59	EFF3-59	sub(l2, l4)	9	6.732	5.588	7.069	4.834	24.223
60	EFF3-60	protectedDiv(l3, abs(l2))	10	7.14	5.719	7.844	4.587	25.29
61	EFF3-61	pow(sub(l3, l2), protectedNeg(l4))	19	13.6145	10.9115	14.2935	8.3795	47.199

62	EFF3-62	protectedDiv(protectedNeg(l4), l2)	9	6.732	5.588	7.069	4.834	24.223
63	EFF3-63	pow(protectedDiv(l4, l2), protectedDiv(l1, l2))	14	10.2505	8.3915	10.735	6.522	35.899
64	EFF3-64	protectedDiv(- 1, mul(l4, l3))	15	11.338	9.421	11.524	7.058	39.341
65	EFF3-65	mul(protectedNeg(l2), l4)	0	0	0	0	0	0
66	EFF3-66	pow(abs(l1), l4)	14	10.108	8.212	11.183	6.362	35.865
67	EFF3-67	abs(protectedDiv(sub(l3, l2), mul(0, l2)))	16	13.227	11.6855	14.866	11.429	51.2075
68	EFF3-68	pow(pow(l3, l1), l2)	11	8.4805	7.163	6.902	6.104	28.6495
69	EFF3-69	pow(abs(l3), abs(1))	0	0	0	0	0	0
70	EFF3-70	add(sub(l1, l4), mul(l2, l1))	13	9.6915	8.091	10.324	6.633	34.7395
71	EFF3-71	sub(l1, l4)	24	18.3785	15.544	19.6685	13.0155	66.6065
72	EFF3-72	add(abs(l1), protectedNeg(l1))	0	0	0	0	0	0
73	EFF3-73	protectedDiv(l2, l4)	9	6.732	5.588	7.069	4.834	24.223
74	EFF3-74	mul(sub(- 1, l4), protectedNeg(protectedNeg(l4)))	9	6.732	5.588	7.069	4.834	24.223
75	EFF3-75	mul(l1, abs(l4))	9	6.677	5.493	5.892	4.951	23.013
76	EFF3-76	pow(protectedDiv(l3, l4), l3)	17	13.1835	11.2395	12.4655	9.5325	46.421
77	EFF3-77	protectedNeg(mul(l1, abs(l1)))	0	0	0	0	0	0
78	EFF3-78	pow(l1, l4)	14	10.108	8.212	11.183	6.362	35.865
79	EFF3-79	abs(protectedDiv(- 1, l4))	9	6.732	5.588	7.069	4.834	24.223
80	EFF3-80	protectedDiv(abs(l3), mul(abs(sub(l4, l4)), l3))	0	0	0	0	0	0
81	EFF3-81	pow(l2, l3)	9	6.742	5.588	7.079	4.834	24.243
82	EFF3-82	add(sub(l1, l4), mul(l2, l2))	22	16.753	14.0385	18.1185	11.412	60.322
83	EFF3-83	abs(- 1)	0	0	0	0	0	0
84	EFF3-84	sub(l2, - 1)	9	6.732	5.588	7.069	4.834	24.223
85	EFF3-85	protectedDiv(add(l2, l2), mul(l1, - 1))	14	10.23	8.3745	10.247	6.9675	35.819
86	EFF3-86	pow(add(- 1, l1), sub(l1, add(l2, 1)))	20	14.9115	12.385	16.0855	9.65	53.032
87	EFF3-87	abs(protectedDiv(l1, l4))	16	11.4455	9.1465	12.1175	7.1615	39.871
88	EFF3-88	mul(abs(l4), l2)	0	0	0	0	0	0
89	EFF3-89	sub(l2, l2)	0	0	0	0	0	0
90	EFF3-90	mul(l4, l3)	15	11.338	9.421	11.524	7.058	39.341
91	EFF3-91	sub(pow(0, l2), l1)	20	15.0765	12.5845	16.122	10.129	53.912
92	EFF3-92	abs(add(protectedNeg(l3), 1))	0	0	0	0	0	0
93	EFF3-93	protectedNeg(mul(l2, 1))	10	7.127	5.698	7.861	4.563	25.249

94	EFF3-94	abs(l3)	0	0	0	0	0	0
95	EFF3-95	pow(l1, l2)	17	12.4425	10.113	12.584	6.9775	42.117
96	EFF3-96	l4	10	7.127	5.698	7.861	4.563	25.249
97	EFF3-97	protectedDiv(l3, add(l4, l1))	22	16.9175	14.3865	18.1335	12.182	61.6195
98	EFF3-98	pow(l3, l4)	14	10.618	8.841	10.844	6.668	36.971
99	EFF3-99	protectedNeg(mul(l2, 1))	10	7.127	5.698	7.861	4.563	25.249
100	EFF3-100	pow(l3, pow(l3, l2))	11	8.5395	7.2835	8.2815	6.2935	30.398
101	EFF3-101	abs(0)	0	0	0	0	0	0
102	EFF3-102	pow(pow(l3, l2), sub(-1, l4))	15	11.106	9.0275	11.656	7.1565	38.946
103	EFF3-103	protectedDiv(protectedNeg(l4), protectedDiv(-1, l4))	10	7.127	5.698	7.861	4.563	25.249
104	EFF3-104	sub(l2, l4)	9	6.732	5.588	7.069	4.834	24.223
105	EFF3-105	pow(l2, 1)	9	6.732	5.588	7.069	4.834	24.223
106	EFF3-106	sub(l1, l4)	24	18.3785	15.544	19.6685	13.0155	66.6065
107	EFF3-107	protectedDiv(l2, l2)	17	12.2405	10.0005	13.0075	7.572	42.8205
108	EFF3-108	protectedDiv(l2, mul(l1, -1))	14	10.23	8.3745	10.247	6.9675	35.819
109	EFF3-109	pow(l3, sub(l1, l4))	12	8.898	7.25	9.077	5.876	31.101
110	EFF3-110	protectedDiv(mul(l2, l1), l4)	12	8.997	7.4705	9.18	6.621	32.2685
111	EFF3-111	pow(l1, l4)	14	10.108	8.212	11.183	6.362	35.865
112	EFF3-112	pow(l1, -1)	0	0	0	0	0	0
113	EFF3-113	sub(l3, l2)	20	15.0765	12.5845	16.122	10.129	53.912
114	EFF3-114	pow(l2, l2)	0	0	0	0	0	0
115	EFF3-115	pow(l2, l4)	9	6.732	5.588	7.069	4.834	24.223
116	EFF3-116	protectedDiv(pow(l3, l2), l1)	13	10.6705	9.4205	9.497	8.64	38.228
117	EFF3-117	abs(abs(l2))	9	6.732	5.588	7.069	4.834	24.223
118	EFF3-118	mul(l4, sub(l3, l2))	15	11.338	9.421	11.524	7.058	39.341
119	EFF3-119	add(protectedDiv(-1, l3), mul(l3, l2))	13	10.0895	8.5935	9.9415	7.5235	36.148
120	EFF3-120	protectedNeg(abs(protectedNeg(abs(l1))))	0	0	0	0	0	0
121	EFF3-121	pow(0, 1)	0	0	0	0	0	0
122	EFF3-122	pow(sub(l1, l3), mul(l4, l4))	15	10.649	8.507	11.4195	6.6225	37.198
123	EFF3-123	pow(l2, 1)	9	6.732	5.588	7.069	4.834	24.223
124	EFF3-124	sub(l4, l2)	10	7.127	5.698	7.861	4.563	25.249
125	EFF3-125	protectedDiv(l1, l4)	16	11.4455	9.1465	12.1175	7.1615	39.871



126	EFF3-126	add(sub(l2, l4), mul(l2, l1))	15	11.335	9.3555	9.2645	7.9355	37.8905
127	EFF3-127	protectedDiv(protectedNeg(l4), protectedDiv(-1, l4))	10	7.127	5.698	7.861	4.563	25.249
128	EFF3-128	protectedNeg(l4)	9	6.732	5.588	7.069	4.834	24.223
129	EFF3-129	sub(pow(l3, l2), 0)	13	9.719	8.0385	10.279	6.775	34.8115
130	EFF3-130	add(protectedDiv(l2, l4), add(l3, l1))	9	6.732	5.588	7.069	4.834	24.223
131	EFF3-131	pow(l3, l4)	14	10.618	8.841	10.844	6.668	36.971
132	EFF3-132	pow(l3, sub(l3, l2))	25	18.0965	14.8055	19.101	12.481	64.484
133	EFF3-133	pow(l4, -1)	9	6.732	5.588	7.069	4.834	24.223
134	EFF3-134	pow(abs(l1), sub(l3, protectedNeg(-1)))	0	0	0	0	0	0
135	EFF3-135	pow(l3, l4)	14	10.618	8.841	10.844	6.668	36.971
136	EFF3-136	sub(pow(l3, l1), l2)	27	20.049	16.614	21.4885	13.5595	71.711
137	EFF3-137	protectedDiv(l3, l2)	10	7.14	5.719	7.844	4.587	25.29
138	EFF3-138	sub(l2, l4)	9	6.732	5.588	7.069	4.834	24.223
139	EFF3-139	pow(protectedDiv(l3, l4), l4)	14	10.618	8.841	10.844	6.668	36.971
140	EFF3-140	protectedDiv(l3, l2)	10	7.14	5.719	7.844	4.587	25.29
141	EFF3-141	abs(sub(l1, protectedNeg(l2)))	24	18.3785	15.544	19.6685	13.0155	66.6065
142	EFF3-142	pow(l3, protectedNeg(-1))	0	0	0	0	0	0
143	EFF3-143	sub(pow(0, l2), l4)	0	0	0	0	0	0
144	EFF3-144	mul(protectedNeg(protectedNeg(mul(0, l4))), protectedDiv(l3, l4))	18	14.532	12.538	11.781	11.013	49.864
145	EFF3-145	add(protectedDiv(l2, sub(l3, l2)), add(l3, l1))	15	11.089	9.092	8.8355	7.3885	36.405
146	EFF3-146	abs(l2)	9	6.732	5.588	7.069	4.834	24.223
147	EFF3-147	protectedDiv(abs(l1), protectedDiv(l2, l3))	11	7.958	6.5255	8.038	5.408	27.9295
148	EFF3-148	pow(add(-1, pow(add(l2, l2), protectedDiv(0, l4))), sub(l1, l4))	11	8.3555	6.899	8.9255	5.242	29.422
149	EFF3-149	protectedDiv(pow(l4, l4), sub(sub(l4, 1), add(l2, l3)))	26	19.9785	17.05	21.117	14.7235	72.869
150	EFF3-150	pow(pow(l3, l1), sub(l2, l4))	14	10.3905	8.569	9.4415	7.3135	35.7145
151	EFF3-151	pow(l3, l1)	0	0	0	0	0	0
152	EFF3-152	sub(pow(l2, l2), l1)	0	0	0	0	0	0
153	EFF3-153	protectedDiv(l3, protectedDiv(-1, l4))	17	12.0745	9.6415	12.7635	7.4395	41.919
154	EFF3-154	add(l1, l4)	21	15.8065	13.1745	16.772	10.499	56.252
155	EFF3-155	add(sub(l3, l2), protectedNeg(l1))	22	16.425	13.6215	17.504	10.9875	58.538
156	EFF3-156	pow(add(abs(protectedNeg(l4)), l1), l4)	9	6.677	5.493	5.892	4.951	23.013

157	EFF3-157	pow(protectedDiv(1, l4), l3)	13	9.535	7.874	9.5865	6.322	33.3175
158	EFF3-158	protectedDiv(protectedNeg(l4), sub(mul(0, l2), sub(l2, 0)))	9	6.732	5.588	7.069	4.834	24.223
159	EFF3-159	protectedDiv(l2, pow(l3, l2))	15	11.335	9.3555	9.2645	7.9355	37.8905
160	EFF3-160	pow(add(l3, l4), l4)	15	11.338	9.421	11.524	7.058	39.341

The values of FVe and fitness score of individuals in Generation 4 (on training set)

id	EFF	Experssion	FVe	fitness score				
				FMI	JC	PR	RR	SUMfs
1	EFF4-1	pow(protectedDiv(1, protectedDiv(0, l4)), l3)	16	12.452	10.468	10.341	9.593	42.854
2	EFF4-2	protectedNeg(mul(l2, 1))	10	7.127	5.698	7.861	4.563	25.249
3	EFF4-3	pow(abs(l2), sub(l1, l4))	16	11.4205	9.1825	12.3115	7.2835	40.198
4	EFF4-4	protectedDiv(abs(l3), l2)	10	7.14	5.719	7.844	4.587	25.29
5	EFF4-5	sub(l3, l2)	20	15.0765	12.5845	16.122	10.129	53.912
6	EFF4-6	pow(pow(l3, l4), sub(-1, l4))	19	13.6145	10.9115	14.2935	8.3795	47.199
7	EFF4-7	abs(add(l2, l2))	9	6.732	5.588	7.069	4.834	24.223
8	EFF4-8	add(sub(l3, l4), protectedNeg(l1))	23	17.7045	14.977	18.951	12.6775	64.31
9	EFF4-9	protectedDiv(abs(l1), l1)	0	0	0	0	0	0
10	EFF4-10	protectedDiv(l3, l2)	10	7.14	5.719	7.844	4.587	25.29
11	EFF4-11	sub(l1, l4)	24	18.3785	15.544	19.6685	13.0155	66.6065
12	EFF4-12	pow(add(l3, l3), pow(-1, l4))	16	11.38	9.086	12.153	6.935	39.554
13	EFF4-13	abs(protectedDiv(l3, l4))	14	10.7075	9.0395	9.9855	7.7245	37.457
14	EFF4-14	protectedDiv(protectedNeg(l4), l1)	16	11.4455	9.1465	12.1175	7.1615	39.871
15	EFF4-15	l4	10	7.127	5.698	7.861	4.563	25.249
16	EFF4-16	protectedDiv(protectedNeg(l4), protectedNeg(l2))	9	6.732	5.588	7.069	4.834	24.223
17	EFF4-17	abs(l1)	0	0	0	0	0	0
18	EFF4-18	protectedDiv(mul(l2, l1), l2)	7	4.7785	3.756	4.85	2.784	16.1685
19	EFF4-19	pow(l3, l3)	0	0	0	0	0	0
20	EFF4-20	abs(l4)	10	7.127	5.698	7.861	4.563	25.249
21	EFF4-21	protectedNeg(l2)	10	7.127	5.698	7.861	4.563	25.249
22	EFF4-22	add(sub(l1, l4), 1)	24	18.3785	15.544	19.6685	13.0155	66.6065
23	EFF4-23	pow(add(abs(protectedNeg(l4)), l1), l3)	22	16.7225	14.0015	17.464	11.143	59.331
24	EFF4-24	protectedDiv(protectedNeg(l4), l2)	9	6.732	5.588	7.069	4.834	24.223
25	EFF4-25	pow(protectedDiv(l4, l2), protectedDiv(1, l3))	10	7.127	5.698	7.861	4.563	25.249
26	EFF4-26	abs(abs(pow(l1, 0)))	0	0	0	0	0	0
27	EFF4-27	protectedDiv(add(1, l2), l1)	13	10.193	8.667	9.268	7.8665	35.9945
28	EFF4-28	protectedDiv(protectedNeg(l4), protectedNeg(l2))	9	6.732	5.588	7.069	4.834	24.223
29	EFF4-29	protectedDiv(-1, mul(l3, l3))	0	0	0	0	0	0

30	EFF4-30	mul(protectedNeg(protectedNeg(mul(l2, l4))), protectedDiv(l3, l4))	18	14.532	12.538	11.781	11.013	49.864
31	EFF4-31	add(l1, protectedNeg(pow(0, l2)))	24	18.3785	15.544	19.6685	13.0155	66.6065
32	EFF4-32	add(sub(l2, l3), mul(l2, l1))	13	9.6915	8.091	10.324	6.633	34.7395
33	EFF4-33	mul(protectedNeg(protectedNeg(mul(0, l4))), l4)	0	0	0	0	0	0
34	EFF4-34	add(sub(l1, l4), mul(l4, l1))	14	10.124	8.234	10.647	6.4085	35.4135
35	EFF4-35	pow(l3, mul(l4, l4))	14	10.618	8.841	10.844	6.668	36.971
36	EFF4-36	protectedDiv(mul(l2, l1), protectedDiv(l2, l4))	17	12.2405	10.0005	13.0075	7.572	42.8205
37	EFF4-37	pow(abs(l2), sub(l1, l2))	16	12.555	10.7135	11.269	9.2565	43.794
38	EFF4-38	protectedNeg(mul(l1, add(mul(l2, l2), mul(l3, l1))))	32	25.346	22.385	25.4365	20.4185	93.586
39	EFF4-39	protectedDiv(protectedNeg(l4), l1)	16	11.4455	9.1465	12.1175	7.1615	39.871
40	EFF4-40	mul(l4, -1)	9	6.732	5.588	7.069	4.834	24.223
41	EFF4-41	abs(sub(l1, protectedNeg(sub(l4, l1))))	10	7.127	5.698	7.861	4.563	25.249
42	EFF4-42	pow(l2, l4)	9	6.732	5.588	7.069	4.834	24.223
43	EFF4-43	sub(add(l3, l3), l4)	23	17.7045	14.977	18.951	12.6775	64.31
44	EFF4-44	pow(l2, abs(sub(l2, l2)))	0	0	0	0	0	0
45	EFF4-45	mul(l4, sub(l3, l2))	15	11.338	9.421	11.524	7.058	39.341
46	EFF4-46	pow(sub(l1, l3), mul(l2, l4))	0	0	0	0	0	0
47	EFF4-47	add(l1, l4)	21	15.8065	13.1745	16.772	10.499	56.252
48	EFF4-48	add(protectedNeg(l2), 1)	10	7.127	5.698	7.861	4.563	25.249
49	EFF4-49	pow(l4, l4)	0	0	0	0	0	0
50	EFF4-50	abs(protectedNeg(l2))	9	6.732	5.588	7.069	4.834	24.223
51	EFF4-51	pow(l2, l1)	16	12.555	10.7135	11.269	9.2565	43.794
52	EFF4-52	pow(l1, protectedDiv(l1, l2))	10	7.0945	5.6965	7.1025	4.631	24.5245
53	EFF4-53	protectedDiv(add(l3, l4), add(l3, l4))	12	10.03	9.0105	10.707	8.787	38.5345
54	EFF4-54	pow(sub(l1, l3), l2)	12	8.778	7.1435	9.085	5.1405	30.147
55	EFF4-55	sub(sub(l1, l2), pow(abs(protectedNeg(l4)), l2))	0	0	0	0	0	0
56	EFF4-56	add(protectedDiv(pow(l3, l2), l3), mul(l3, l2))	16	11.44	9.176	12.033	7.175	39.824
57	EFF4-57	sub(l3, l3)	0	0	0	0	0	0
58	EFF4-58	sub(pow(l3, l2), l2)	16	11.831	9.7465	12.533	8.06	42.1705
59	EFF4-59	add(sub(l3, l2), l4)	21	15.8065	13.1645	16.912	10.559	56.442
60	EFF4-60	pow(l3, sub(l2, l2))	0	0	0	0	0	0

61	EFF4-61	pow(l3, sub(l1, pow(l2, l4)))	20	15.0825	12.5005	16.0325	9.6155	53.231
62	EFF4-62	abs(protectedDiv(-1, l4))	9	6.732	5.588	7.069	4.834	24.223
63	EFF4-63	l4	10	7.127	5.698	7.861	4.563	25.249
64	EFF4-64	add(sub(l1, l4), l2)	22	16.753	14.0385	18.1185	11.412	60.322
65	EFF4-65	abs(protectedDiv(sub(l3, l2), l4))	12	9.0975	7.6495	8.8555	6.5645	32.167
66	EFF4-66	sub(pow(l3, l2), 0)	13	9.719	8.0385	10.279	6.775	34.8115
67	EFF4-67	protectedDiv(pow(l3, l2), l1)	13	10.6705	9.4205	9.497	8.64	38.228
68	EFF4-68	l4	10	7.127	5.698	7.861	4.563	25.249
69	EFF4-69	add(sub(l3, l2), l1)	10	7.127	5.698	7.861	4.563	25.249
70	EFF4-70	pow(1, l4)	0	0	0	0	0	0
71	EFF4-71	abs(protectedNeg(pow(mul(l2, l1), l2)))	17	12.4425	10.113	12.584	6.9775	42.117
72	EFF4-72	mul(l4, sub(l1, l2))	9	6.677	5.493	5.892	4.951	23.013
73	EFF4-73	pow(add(-1, pow(add(l2, l2), pow(l2, l4))), sub(l1, l4))	16	11.4205	9.1825	12.3115	7.2835	40.198
74	EFF4-74	pow(add(abs(protectedNeg(l4)), l1), sub(add(l3, 0), sub(l3, l2)))	17	12.4425	10.113	12.584	6.9775	42.117
75	EFF4-75	protectedDiv(l2, l4)	9	6.732	5.588	7.069	4.834	24.223
76	EFF4-76	protectedDiv(l1, l2)	14	10.23	8.3745	10.247	6.9675	35.819
77	EFF4-77	pow(add(-1, l1), sub(l1, add(l3, 1)))	0	0	0	0	0	0
78	EFF4-78	abs(l4)	10	7.127	5.698	7.861	4.563	25.249
79	EFF4-79	add(protectedDiv(-1, l3), mul(l3, l2))	13	10.0895	8.5935	9.9415	7.5235	36.148
80	EFF4-80	sub(pow(0, l2), l1)	20	15.0765	12.5845	16.122	10.129	53.912
81	EFF4-81	protectedNeg(add(l2, l2))	10	7.127	5.698	7.861	4.563	25.249
82	EFF4-82	add(l2, l2)	9	6.732	5.588	7.069	4.834	24.223
83	EFF4-83	add(l2, l4)	0	0	0	0	0	0
84	EFF4-84	pow(0, l4)	9	6.732	5.588	7.069	4.834	24.223
85	EFF4-85	sub(l1, l4)	24	18.3785	15.544	19.6685	13.0155	66.6065
86	EFF4-86	add(protectedDiv(l2, l4), add(-1, l1))	17	12.0745	9.6415	12.7635	7.4395	41.919
87	EFF4-87	pow(l4, sub(l3, l2))	10	7.127	5.698	7.861	4.563	25.249
88	EFF4-88	sub(l3, protectedDiv(0, l4))	17	13.1535	11.0955	11.8815	9.2565	45.387
89	EFF4-89	protectedDiv(protectedDiv(-1, l4), mul(l4, l3))	15	11.338	9.421	11.524	7.058	39.341
90	EFF4-90	protectedDiv(pow(l4, l4), sub(sub(l4, 1), add(l2, pow(0, l2))))	9	6.732	5.588	7.069	4.834	24.223
91	EFF4-91	pow(protectedDiv(1, pow(l3, l2)), l3)	15	11.106	9.0275	11.656	7.1565	38.946

92	EFF4-92	protectedNeg(l4)	9	6.732	5.588	7.069	4.834	24.223
93	EFF4-93	pow(l1, l2)	17	12.4425	10.113	12.584	6.9775	42.117
94	EFF4-94	pow(mul(l1, -1), l3)	0	0	0	0	0	0
95	EFF4-95	pow(add(l3, l3), pow(l2, l4))	13	9.719	8.0385	10.279	6.765	34.8015
96	EFF4-96	add(l4, mul(l2, l1))	17	12.4425	10.113	12.584	6.9775	42.117
97	EFF4-97	protectedDiv(pow(l3, l3), l1)	0	0	0	0	0	0
98	EFF4-98	pow(abs(l4), sub(l1, l4))	10	7.356	6.01	6.551	5.226	25.143
99	EFF4-99	protectedNeg(mul(l1, l4))	13	9.7525	8.0635	9.056	6.932	33.804
100	EFF4-100	add(sub(l1, l4), mul(l2, l2))	22	16.753	14.0385	18.1185	11.412	60.322
101	EFF4-101	add(sub(l3, l3), protectedNeg(l1))	0	0	0	0	0	0
102	EFF4-102	add(sub(l1, l4), mul(l1, l1))	23	17.7045	14.977	18.951	12.6775	64.31
103	EFF4-103	protectedDiv(l3, protectedDiv(l2, l4))	10	7.127	5.698	7.861	4.563	25.249
104	EFF4-104	add(sub(l1, l1), mul(l2, l1))	13	9.8535	8.2205	8.5755	7.0365	33.686
105	EFF4-105	pow(sub(l1, l3), mul(l4, l4))	15	10.649	8.507	11.4195	6.6225	37.198
106	EFF4-106	abs(protectedDiv(-1, l4))	9	6.732	5.588	7.069	4.834	24.223
107	EFF4-107	add(sub(l1, l4), mul(l2, l4))	24	18.3785	15.544	19.6685	13.0155	66.6065
108	EFF4-108	pow(l3, sub(l2, l2))	0	0	0	0	0	0
109	EFF4-109	protectedDiv(abs(l1), protectedDiv(l2, l4))	11	8.085	6.5455	8.56	5.156	28.3465
110	EFF4-110	protectedDiv(l2, l4)	9	6.732	5.588	7.069	4.834	24.223
111	EFF4-111	pow(protectedDiv(1, l4), l4)	0	0	0	0	0	0
112	EFF4-112	pow(add(l3, sub(l1, l4)), pow(l2, l1))	11	8.7625	7.549	8.359	6.523	31.1935
113	EFF4-113	protectedDiv(protectedNeg(l4), protectedDiv(l4, l4))	18	14.532	12.538	11.781	11.013	49.864
114	EFF4-114	protectedDiv(pow(l3, l2), l1)	13	10.6705	9.4205	9.497	8.64	38.228
115	EFF4-115	sub(pow(l3, l1), l2)	27	20.049	16.614	21.4885	13.5595	71.711
116	EFF4-116	sub(pow(l3, l2), l2)	16	11.831	9.7465	12.533	8.06	42.1705
117	EFF4-117	abs(protectedDiv(sub(l3, l2), l2))	10	7.14	5.719	7.844	4.587	25.29
118	EFF4-118	pow(mul(l2, 1), l3)	9	6.742	5.588	7.079	4.834	24.243
119	EFF4-119	add(l2, mul(l2, l1))	15	11.335	9.3555	9.2645	7.9355	37.8905
120	EFF4-120	abs(abs(l2))	9	6.732	5.588	7.069	4.834	24.223
121	EFF4-121	pow(add(l1, l1), l4)	13	9.548	7.807	10.526	6.016	33.897
122	EFF4-122	pow(pow(l3, l1), add(l2, l4))	0	0	0	0	0	0
123	EFF4-123	protectedDiv(l2, protectedNeg(l2))	17	12.2405	10.0005	13.0075	7.572	42.8205

124	EFF4-124	sub(sub(l1, l2), pow(l3, l2))	15	10.909	8.801	11.16	6.666	37.536
125	EFF4-125	pow(l2, mul(l2, l1))	0	0	0	0	0	0
126	EFF4-126	add(sub(l1, l4), mul(add(l3, l4), l1))	16	11.762	9.7135	12.678	7.899	42.0525
127	EFF4-127	pow(l2, l4)	9	6.732	5.588	7.069	4.834	24.223
128	EFF4-128	add(sub(l3, l2), protectedNeg(l1))	22	16.425	13.6215	17.504	10.9875	58.538
129	EFF4-129	pow(abs(l2), sub(l1, l4))	16	11.4205	9.1825	12.3115	7.2835	40.198
130	EFF4-130	sub(sub(l3, l2), l2)	21	15.8065	13.1645	16.912	10.559	56.442
131	EFF4-131	pow(protectedDiv(l4, l2), protectedDiv(l4, l2))	10	7.127	5.698	7.861	4.563	25.249
132	EFF4-132	sub(add(l2, 1), l1)	27	20.4345	17.228	21.5035	13.588	72.754
133	EFF4-133	pow(l2, l3)	9	6.742	5.588	7.079	4.834	24.243
134	EFF4-134	protectedDiv(protectedNeg(l4), l2)	9	6.732	5.588	7.069	4.834	24.223
135	EFF4-135	pow(abs(l1), sub(l3, l2))	15	11.5535	9.8455	11.5625	8.332	41.2935
136	EFF4-136	pow(add(l3, l3), pow(l2, l1))	13	10.2705	8.776	8.3305	7.36	34.737
137	EFF4-137	pow(l3, pow(l3, l3))	0	0	0	0	0	0
138	EFF4-138	pow(sub(l1, l3), mul(l4, mul(l2, l2)))	0	0	0	0	0	0
139	EFF4-139	sub(l2, l1)	27	20.4345	17.228	21.5035	13.588	72.754
140	EFF4-140	protectedNeg(mul(l2, 1))	10	7.127	5.698	7.861	4.563	25.249
141	EFF4-141	add(l3, 1)	0	0	0	0	0	0
142	EFF4-142	sub(pow(0, l2), protectedNeg(l4))	10	7.127	5.698	7.861	4.563	25.249
143	EFF4-143	abs(l2)	9	6.732	5.588	7.069	4.834	24.223
144	EFF4-144	pow(add(l3, l3), pow(l2, l4))	13	9.719	8.0385	10.279	6.765	34.8015
145	EFF4-145	mul(pow(l3, l2), l2)	14	10.409	8.5685	10.869	7.415	37.2615
146	EFF4-146	add(l4, 1)	10	7.127	5.698	7.861	4.563	25.249
147	EFF4-147	protectedDiv(abs(l1), protectedDiv(l4, l3))	17	12.394	10.132	12.792	7.998	43.316
148	EFF4-148	add(sub(l1, l4), protectedNeg(l2))	0	0	0	0	0	0
149	EFF4-149	protectedDiv(pow(l2, l2), l1)	0	0	0	0	0	0
150	EFF4-150	protectedDiv(l2, abs(l2))	17	12.2405	10.0005	13.0075	7.572	42.8205
151	EFF4-151	pow(add(-1, l2), sub(l1, add(l2, 1)))	16	11.741	9.531	12.929	8.1	42.301
152	EFF4-152	pow(l1, l4)	14	10.108	8.212	11.183	6.362	35.865
153	EFF4-153	pow(l1, pow(l3, l2))	12	9.64	8.425	8.296	6.823	33.184
154	EFF4-154	pow(l1, l3)	0	0	0	0	0	0
155	EFF4-155	protectedDiv(l3, sub(l3, l2))	15	11.089	9.092	8.8355	7.3885	36.405

156	EFF4-156	protectedDiv(pow(sub(l1, l4), l4), sub(sub(l4, 1), add(l2, l3)))	15	10.73	8.6	11.29	6.697	37.317
157	EFF4-157	pow(protectedDiv(l4, abs(l2)), protectedDiv(l1, l2))	14	10.2505	8.3915	10.735	6.522	35.899
158	EFF4-158	pow(l3, sub(l3, l2))	25	18.0965	14.8055	19.101	12.481	64.484
159	EFF4-159	pow(l4, pow(l3, l2))	10	7.127	5.698	7.861	4.563	25.249
160	EFF4-160	sub(protectedDiv(l3, l4), 0)	14	10.7075	9.0395	9.9855	7.7245	37.457



The values of FVe and fitness score of individuals in Generation 5 (on training set)

id	EFF	Experssion	FVe	fitness score				
				FMI	JC	PR	RR	SUMfs
1	EFF5-1	add(sub(l3, l2), l4)	21	15.8065	13.1645	16.912	10.559	56.442
2	EFF5-2	pow(add(-1, pow(add(l2, l2), pow(l2, l4))), sub(protectedDiv(l4, l4), l4))	0	0	0	0	0	0
3	EFF5-3	add(sub(l1, l1), pow(0, l2))	10	7.127	5.698	7.861	4.563	25.249
4	EFF5-4	protectedDiv(protectedDiv(-1, l1), mul(l4, l3))	9	6.6365	5.4885	7.2805	4.757	24.1625
5	EFF5-5	protectedDiv(sub(l3, l2), abs(l2))	10	7.14	5.719	7.844	4.587	25.29
6	EFF5-6	add(sub(l3, l2), l1)	10	7.127	5.698	7.861	4.563	25.249
7	EFF5-7	add(protectedDiv(pow(l3, l2), l3), l1)	23	17.329	14.433	17.8225	12.02	61.6045
8	EFF5-8	mul(sub(-1, l4), l2)	10	7.127	5.698	7.861	4.563	25.249
9	EFF5-9	protectedNeg(l4)	9	6.732	5.588	7.069	4.834	24.223
10	EFF5-10	add(l1, protectedNeg(l1))	0	0	0	0	0	0
11	EFF5-11	pow(l1, pow(l2, l1))	13	9.6115	7.902	8.241	6.9965	32.751
12	EFF5-12	pow(pow(l3, l4), sub(-1, l4))	19	13.6145	10.9115	14.2935	8.3795	47.199
13	EFF5-13	add(add(-1, l2), l2)	9	6.732	5.588	7.069	4.834	24.223
14	EFF5-14	pow(l2, l2)	0	0	0	0	0	0
15	EFF5-15	protectedDiv(protectedDiv(-1, l4), mul(l4, l3))	15	11.338	9.421	11.524	7.058	39.341
16	EFF5-16	protectedDiv(l3, sub(l3, l2))	15	11.089	9.092	8.8355	7.3885	36.405
17	EFF5-17	add(sub(l1, l4), l4)	0	0	0	0	0	0
18	EFF5-18	sub(pow(0, l2), protectedNeg(add(protectedNeg(l1), protectedDiv(l2, 1))))	0	0	0	0	0	0
19	EFF5-19	add(sub(l3, pow(0, l2)), l4)	0	0	0	0	0	0
20	EFF5-20	sub(add(l3, l3), l4)	23	17.7045	14.977	18.951	12.6775	64.31
21	EFF5-21	add(l2, l2)	9	6.732	5.588	7.069	4.834	24.223
22	EFF5-22	add(sub(l3, l2), l3)	22	16.425	13.6215	17.504	10.9875	58.538
23	EFF5-23	add(l2, mul(l4, l1))	14	10.108	8.212	11.183	6.362	35.865
24	EFF5-24	add(sub(l3, l4), protectedNeg(protectedDiv(sub(l3, l2), l4)))	10	7.127	5.698	7.861	4.563	25.249
25	EFF5-25	protectedNeg(add(l2, l2))	10	7.127	5.698	7.861	4.563	25.249
26	EFF5-26	add(sub(0, l2), protectedNeg(l1))	20	15.0765	12.5845	16.122	10.129	53.912
27	EFF5-27	protectedDiv(l3, sub(l3, l2))	15	11.089	9.092	8.8355	7.3885	36.405

28	EFF5-28	abs(pow(l4, l4))	0	0	0	0	0	0
29	EFF5-29	abs(protectedDiv(sub(l3, l3), l2))	17	12.2405	10.0005	13.0075	7.572	42.8205
30	EFF5-30	pow(protectedDiv(l4, abs(l2)), sub(l3, l2))	10	7.127	5.698	7.861	4.563	25.249
31	EFF5-31	abs(sub(l1, protectedNeg(sub(l4, l1))))	10	7.127	5.698	7.861	4.563	25.249
32	EFF5-32	sub(protectedDiv(l3, l3), 0)	0	0	0	0	0	0
33	EFF5-33	protectedDiv(l2, l4)	9	6.732	5.588	7.069	4.834	24.223
34	EFF5-34	pow(abs(protectedDiv(l4, l2)), sub(l1, l4))	20	15.588	13.3125	13.947	11.1545	54.002
35	EFF5-35	pow(abs(l2), sub(l1, l4))	16	11.4205	9.1825	12.3115	7.2835	40.198
36	EFF5-36	add(sub(l1, l4), mul(add(l3, l4), protectedDiv(l4, l4)))	18	14.532	12.538	11.781	11.013	49.864
37	EFF5-37	abs(l4)	10	7.127	5.698	7.861	4.563	25.249
38	EFF5-38	sub(l3, protectedDiv(l2, l4))	14	10.618	8.841	10.844	6.668	36.971
39	EFF5-39	sub(pow(l3, add(abs(l4), protectedDiv(l3, l2))), l2)	14	10.57	8.769	11.424	6.977	37.74
40	EFF5-40	pow(add(l3, sub(l1, protectedNeg(l4))), pow(l2, l1))	16	11.6085	9.3935	12.0955	7.468	40.5655
41	EFF5-41	pow(mul(l2, 1), l4)	9	6.732	5.588	7.069	4.834	24.223
42	EFF5-42	add(l3, mul(add(l3, l4), l1))	20	14.589	12.1595	15.536	10.4885	52.773
43	EFF5-43	protectedDiv(l2, pow(0, l2))	9	6.732	5.588	7.069	4.834	24.223
44	EFF5-44	pow(add(-1, l2), sub(l2, add(l2, 1)))	9	6.732	5.588	7.069	4.834	24.223
45	EFF5-45	protectedDiv(sub(l3, l4), l2)	10	7.14	5.719	7.844	4.587	25.29
46	EFF5-46	protectedDiv(protectedNeg(l4), protectedNeg(l4))	0	0	0	0	0	0
47	EFF5-47	protectedDiv(pow(l4, l4), sub(l2, add(l2, pow(0, l2))))	9	6.732	5.588	7.069	4.834	24.223
48	EFF5-48	abs(l3)	0	0	0	0	0	0
49	EFF5-49	sub(sub(l3, l2), l2)	21	15.8065	13.1645	16.912	10.559	56.442
50	EFF5-50	protectedDiv(protectedNeg(l4), l1)	16	11.4455	9.1465	12.1175	7.1615	39.871
51	EFF5-51	l4	10	7.127	5.698	7.861	4.563	25.249
52	EFF5-52	pow(protectedDiv(0, l4), protectedDiv(l1, l2))	9	6.4025	5.227	6.663	3.967	22.2595
53	EFF5-53	mul(protectedNeg(protectedNeg(l3)), protectedDiv(l3, l4))	14	10.7075	9.0395	9.9855	7.7245	37.457
54	EFF5-54	pow(l1, 0)	0	0	0	0	0	0
55	EFF5-55	pow(add(l3, l3), pow(l2, l1))	13	10.2705	8.776	8.3305	7.36	34.737
56	EFF5-56	add(sub(l3, l4), mul(l4, l1))	10	7.096	5.5705	6.7335	4.857	24.257
57	EFF5-57	mul(pow(l3, l2), l2)	14	10.409	8.5685	10.869	7.415	37.2615
58	EFF5-58	protectedNeg(mul(l1, l3))	0	0	0	0	0	0
59	EFF5-59	sub(protectedDiv(abs(l4), pow(l1, 0)), l2)	10	7.127	5.698	7.861	4.563	25.249

60	EFF5-60	sub(pow(l3, l4), 0)	14	10.618	8.841	10.844	6.668	36.971
61	EFF5-61	abs(sub(-1, protectedNeg(sub(l4, l1))))	24	18.3785	15.544	19.6685	13.0155	66.6065
62	EFF5-62	pow(l4, pow(l3, l2))	10	7.127	5.698	7.861	4.563	25.249
63	EFF5-63	protectedDiv(mul(l2, l1), protectedDiv(l2, l4))	17	12.2405	10.0005	13.0075	7.572	42.8205
64	EFF5-64	protectedDiv(pow(sub(l1, l4), l2), sub(sub(l4, 1), add(l2, l3)))	18	13.814	11.7525	13.4895	10.5645	49.6205
65	EFF5-65	add(sub(l1, add(l2, 1)), mul(l3, l2))	19	13.6145	10.9115	14.2935	8.3795	47.199
66	EFF5-66	protectedDiv(protectedDiv(sub(l3, l2), l2), abs(l2))	10	7.14	5.719	7.844	4.587	25.29
67	EFF5-67	abs(l2)	9	6.732	5.588	7.069	4.834	24.223
68	EFF5-68	abs(l2)	9	6.732	5.588	7.069	4.834	24.223
69	EFF5-69	protectedDiv(l1, l1)	0	0	0	0	0	0
70	EFF5-70	pow(l3, mul(sub(add(l3, 0), sub(l3, l2)), l4))	0	0	0	0	0	0
71	EFF5-71	protectedDiv(l1, l2)	14	10.23	8.3745	10.247	6.9675	35.819
72	EFF5-72	sub(l4, l2)	10	7.127	5.698	7.861	4.563	25.249
73	EFF5-73	protectedDiv(mul(l2, l1), protectedDiv(l1, l4))	0	0	0	0	0	0
74	EFF5-74	sub(pow(l3, l2), 0)	13	9.719	8.0385	10.279	6.775	34.8115
75	EFF5-75	add(l4, mul(l1, l1))	23	17.155	14.2015	18.294	11.4175	61.068
76	EFF5-76	protectedDiv(l3, l4)	14	10.7075	9.0395	9.9855	7.7245	37.457
77	EFF5-77	abs(protectedDiv(sub(l3, l2), l2))	10	7.14	5.719	7.844	4.587	25.29
78	EFF5-78	sub(sub(l3, l2), l2)	21	15.8065	13.1645	16.912	10.559	56.442
79	EFF5-79	pow(add(-1, pow(add(l2, l2), pow(l2, l4))), sub(l1, l4))	16	11.4205	9.1825	12.3115	7.2835	40.198
80	EFF5-80	protectedDiv(abs(l4), protectedDiv(l4, l3))	17	13.1535	11.0955	11.8815	9.2565	45.387
81	EFF5-81	add(sub(l2, l1), mul(l2, l1))	12	9.0975	7.6495	8.8555	6.5645	32.167
82	EFF5-82	protectedDiv(pow(sub(l1, l4), l4), sub(sub(l4, 1), add(l2, add(-1, l1))))	14	10.765	9.201	10.242	8.073	38.281
83	EFF5-83	add(sub(l1, l4), mul(sub(l1, l4), l2))	13	9.6915	8.091	10.324	6.633	34.7395
84	EFF5-84	pow(l4, sub(l3, l2))	10	7.127	5.698	7.861	4.563	25.249
85	EFF5-85	abs(protectedDiv(mul(l2, l1), l2))	7	4.7785	3.756	4.85	2.784	16.1685
86	EFF5-86	protectedNeg(1)	0	0	0	0	0	0
87	EFF5-87	protectedDiv(pow(sub(add(l3, 0), sub(l3, l2)), l4), sub(sub(l4, 1), add(l2, pow(0, l2))))	10	7.127	5.698	7.861	4.563	25.249
88	EFF5-88	add(sub(l1, l4), mul(l1, sub(l3, l4)))	15	11.208	9.2895	11.727	7.9135	40.138
89	EFF5-89	mul(pow(l3, l2), protectedNeg(l4))	9	6.732	5.588	7.069	4.834	24.223

90	EFF5-90	pow(add(l3, l3), pow(-1, l4))	16	11.38	9.086	12.153	6.935	39.554
91	EFF5-91	protectedDiv(protectedNeg(l4), l2)	9	6.732	5.588	7.069	4.834	24.223
92	EFF5-92	pow(protectedDiv(0, l4), l1)	12	9.2725	7.72	8.4255	6.389	31.807
93	EFF5-93	pow(add(-1, l2), sub(l1, pow(l3, l2)))	18	13.369	10.986	14.141	8.998	47.494
94	EFF5-94	sub(pow(0, l2), abs(l2))	10	7.127	5.698	7.861	4.563	25.249
95	EFF5-95	add(l4, mul(l2, l1))	17	12.4425	10.113	12.584	6.9775	42.117
96	EFF5-96	add(l4, mul(l2, protectedDiv(l3, l4)))	12	8.869	7.3185	9.309	6.025	31.5215
97	EFF5-97	add(sub(l1, l1), mul(l4, l1))	9	6.677	5.493	5.892	4.951	23.013
98	EFF5-98	add(sub(l1, l4), mul(l3, l1))	20	14.6625	12.089	15.8175	10.315	52.884
99	EFF5-99	mul(protectedNeg(protectedNeg(abs(l1))), protectedDiv(l3, l4))	17	12.394	10.132	12.792	7.998	43.316
100	EFF5-100	pow(l1, l4)	14	10.108	8.212	11.183	6.362	35.865
101	EFF5-101	protectedDiv(protectedDiv(-1, l4), mul(l4, l3))	15	11.338	9.421	11.524	7.058	39.341
102	EFF5-102	protectedDiv(protectedNeg(l4), l1)	16	11.4455	9.1465	12.1175	7.1615	39.871
103	EFF5-103	pow(add(l3, l2), pow(l2, l1))	17	12.383	10.149	11.565	8.408	42.505
104	EFF5-104	pow(add(l3, sub(l1, l4)), l4)	10	7.127	5.698	7.861	4.563	25.249
105	EFF5-105	mul(l4, sub(l3, l3))	0	0	0	0	0	0
106	EFF5-106	mul(l4, -1)	9	6.732	5.588	7.069	4.834	24.223
107	EFF5-107	pow(protectedDiv(l1, protectedDiv(0, l4)), l3)	11	9.0845	7.9825	8.34	7.0135	32.4205
108	EFF5-108	abs(add(l2, sub(l1, l4)))	26	19.3555	16.2005	20.419	13.6945	69.6695
109	EFF5-109	pow(l4, sub(l3, l2))	10	7.127	5.698	7.861	4.563	25.249
110	EFF5-110	add(protectedDiv(pow(l3, mul(protectedNeg(l1), protectedDiv(l3, l3))), l3), mul(l3, l2))	12	9.3495	7.9935	9.0415	7.1335	33.518
111	EFF5-111	protectedDiv(l1, protectedNeg(l2))	11	8.059	6.597	8.301	5.7305	28.6875
112	EFF5-112	pow(abs(l4), sub(l1, sub(l1, add(l2, 1))))	10	7.127	5.698	7.861	4.563	25.249
113	EFF5-113	protectedDiv(protectedNeg(l1), l1)	0	0	0	0	0	0
114	EFF5-114	add(sub(l1, l4), mul(add(l3, l4), l1))	16	11.762	9.7135	12.678	7.899	42.0525
115	EFF5-115	pow(add(l3, l3), pow(l2, protectedNeg(abs(l3))))	10	7.14	5.719	7.844	4.587	25.29
116	EFF5-116	pow(add(l3, l3), pow(l2, l2))	0	0	0	0	0	0
117	EFF5-117	protectedNeg(mul(l4, 1))	9	6.732	5.588	7.069	4.834	24.223
118	EFF5-118	add(sub(l1, l4), mul(l1, l2))	13	9.6915	8.091	10.324	6.633	34.7395
119	EFF5-119	pow(protectedDiv(-1, 0), abs(l3))	0	0	0	0	0	0
120	EFF5-120	pow(add(l2, l2), sub(l1, add(l2, 1)))	17	12.622	10.4875	12.8735	8.012	43.995

121	EFF5-121	pow(l4, l2)	10	7.127	5.698	7.861	4.563	25.249
122	EFF5-122	protectedDiv(abs(0), protectedDiv(l4, l3))	18	14.532	12.538	11.781	11.013	49.864
123	EFF5-123	protectedDiv(l2, abs(l2))	17	12.2405	10.0005	13.0075	7.572	42.8205
124	EFF5-124	add(sub(l1, l2), mul(l4, l1))	16	11.2925	8.978	12.1045	6.49	38.865
125	EFF5-125	add(l1, l2)	24	18.3785	15.544	19.6685	13.0155	66.6065
126	EFF5-126	pow(l1, mul(l2, l1))	14	10.379	8.5465	9.1145	7.4185	35.4585
127	EFF5-127	add(sub(l1, l1), mul(l2, pow(l3, l2)))	14	10.409	8.5685	10.869	7.415	37.2615
128	EFF5-128	protectedDiv(l2, l1)	7	5.14	4.18	5.49	3.71	18.52
129	EFF5-129	add(sub(l3, l4), mul(add(l3, l4), l1))	20	15.08	12.633	15.999	10.352	54.064
130	EFF5-130	add(protectedDiv(pow(l3, l2), l3), mul(l3, mul(l1, l4)))	13	9.4025	7.619	10.1265	5.62	32.768
131	EFF5-131	pow(l3, sub(l1, pow(l2, l4)))	20	15.0825	12.5005	16.0325	9.6155	53.231
132	EFF5-132	l1	0	0	0	0	0	0
133	EFF5-133	pow(l4, sub(l3, l4))	10	7.127	5.698	7.861	4.563	25.249
134	EFF5-134	protectedNeg(l2)	10	7.127	5.698	7.861	4.563	25.249
135	EFF5-135	protectedDiv(protectedNeg(l4), 0)	9	6.732	5.588	7.069	4.834	24.223
136	EFF5-136	pow(l2, l1)	16	12.555	10.7135	11.269	9.2565	43.794
137	EFF5-137	add(sub(l3, l2), l1)	10	7.127	5.698	7.861	4.563	25.249
138	EFF5-138	pow(l2, l1)	16	12.555	10.7135	11.269	9.2565	43.794
139	EFF5-139	l4	10	7.127	5.698	7.861	4.563	25.249
140	EFF5-140	protectedDiv(protectedDiv(-1, l2), mul(l4, l3))	0	0	0	0	0	0
141	EFF5-141	add(protectedDiv(l2, l4), add(l4, l1))	17	12.0745	9.6415	12.7635	7.4395	41.919
142	EFF5-142	sub(add(l3, l3), l2)	22	16.425	13.6215	17.504	10.9875	58.538
143	EFF5-143	pow(protectedDiv(l3, protectedDiv(0, l4)), l3)	16	12.452	10.468	10.341	9.593	42.854
144	EFF5-144	mul(l4, l2)	0	0	0	0	0	0
145	EFF5-145	pow(l4, sub(l2, l2))	0	0	0	0	0	0
146	EFF5-146	pow(protectedDiv(1, protectedDiv(0, l4)), l3)	16	12.452	10.468	10.341	9.593	42.854
147	EFF5-147	pow(l1, l4)	14	10.108	8.212	11.183	6.362	35.865
148	EFF5-148	pow(l4, l3)	10	7.127	5.698	7.861	4.563	25.249
149	EFF5-149	sub(pow(l4, l2), 0)	10	7.127	5.698	7.861	4.563	25.249
150	EFF5-150	protectedDiv(protectedDiv(l3, l4), mul(l4, l3))	12	8.919	7.3685	9.179	6.015	31.4815
151	EFF5-151	protectedDiv(mul(l2, l1), protectedDiv(sub(l3, l2), l4))	16	13.227	11.6855	14.866	11.429	51.2075
152	EFF5-152	pow(pow(l3, l4), sub(-1, l4))	19	13.6145	10.9115	14.2935	8.3795	47.199

153	EFF5-153	$\text{pow}(\text{protectedDiv}(\text{abs}(l1), l2), \text{protectedDiv}(1, l3))$	11	7.988	6.43	8.4475	5.1625	28.028
154	EFF5-154	$l4$	10	7.127	5.698	7.861	4.563	25.249
155	EFF5-155	$\text{sub}(l3, \text{add}(-1, \text{pow}(\text{add}(l2, l2), \text{pow}(l2, l4))))$	20	15.0765	12.5845	16.122	10.129	53.912
156	EFF5-156	$\text{abs}(\text{protectedDiv}(\text{sub}(l3, l2), l4))$	12	9.0975	7.6495	8.8555	6.5645	32.167
157	EFF5-157	$\text{abs}(\text{protectedDiv}(l3, l1))$	0	0	0	0	0	0
158	EFF5-158	$\text{pow}(\text{abs}(l4), \text{sub}(l1, l4))$	10	7.356	6.01	6.551	5.226	25.143
159	EFF5-159	$\text{sub}(\text{add}(\text{add}(l3, l3), l3), l4)$	23	17.7045	14.977	18.951	12.6775	64.31
160	EFF5-160	$\text{pow}(l4, \text{sub}(l3, \text{pow}(l3, l1)))$	12	8.699	6.994	9.263	5.309	30.265

The values of FVe and fitness score of individuals in Generation 6 (on training set)

id	EFF	Experssion	FVe	fitness score				
				FMI	JC	PR	RR	SUM <sub>fs</sub>
1	EFF6-1	pow(abs(l4), sub(l1, sub(l1, add(l2, 1))))	5	3.419	2.674	3.802	2.526	12.421
2	EFF6-2	pow(abs(l4), sub(l1, l4))	9	6.717	5.515	5.831	4.974	23.037
3	EFF6-3	protectedDiv(protectedDiv(l3, l4), mul(l2, l3))	0	0	0	0	0	0
4	EFF6-4	add(pow(l2, l4), l2)	5	3.81	3.21	3.91	3.26	14.19
5	EFF6-5	pow(mul(mul(l2, l1), 1), l4)	5	3.81	3.21	3.91	3.26	14.19
6	EFF6-6	pow(add(-1, l2), sub(l1, abs(sub(l1, l2))))	9	6.693	5.49	5.792	4.958	22.933
7	EFF6-7	pow(l4, sub(l3, pow(l1, l1)))	10	7.563	6.237	7.15	5.183	26.133
8	EFF6-8	add(sub(l1, l4), mul(l3, l1))	15	11.0215	9.099	11.6145	8.264	39.999
9	EFF6-9	pow(l3, sub(l3, l2))	21	15.1785	12.4615	16.152	10.964	54.756
10	EFF6-10	abs(protectedDiv(abs(l2), l2))	9	6.5195	5.3405	7.2905	4.5315	23.682
11	EFF6-11	protectedDiv(pow(sub(l1, l4), l2), sub(sub(l4, 1), add(l2, protectedDiv(1, protectedDiv(0, l4)))))	18	14.532	12.538	11.781	11.013	49.864
12	EFF6-12	sub(l4, 0)	5	3.419	2.674	3.802	2.526	12.421
13	EFF6-13	add(protectedDiv(pow(l3, l2), l3), l4)	6	4.239	3.374	4.692	3.086	15.391
14	EFF6-14	pow(protectedDiv(0, l4), protectedDiv(l1, l2))	4	3.024	2.528	3.05	2.373	10.975
15	EFF6-15	pow(l4, sub(l3, l4))	5	3.419	2.674	3.802	2.526	12.421
16	EFF6-16	protectedDiv(l3, sub(l3, l2))	14	10.432	8.561	8.2505	7.0645	34.308
17	EFF6-17	add(l2, l2)	5	3.81	3.21	3.91	3.26	14.19
18	EFF6-18	add(sub(l1, add(l3, 1)), mul(l3, l2))	8	5.9685	4.92	6.2785	4.5155	21.6825
19	EFF6-19	pow(add(l3, l4), pow(l2, l1))	9	6.3145	4.996	6.8615	4.5395	22.7115
20	EFF6-20	add(l1, l2)	16	12.8215	11.142	13.4335	10.3565	47.7535
21	EFF6-21	add(sub(l4, l4), mul(l1, sub(l3, l4)))	25	20.005	17.5895	20.2	16.701	74.4955
22	EFF6-22	add(protectedDiv(pow(l3, mul(protectedNeg(l1), protectedDiv(l1, l3))), l3), mul(l3, l2))	11	8.6095	7.3835	8.3315	6.7035	31.028
23	EFF6-23	add(sub(l1, l4), mul(l1, l1))	16	12.641	10.8675	13.2595	9.9835	46.7515
24	EFF6-24	mul(pow(l3, l2), l2)	10	7.487	6.1905	7.71	5.841	27.2285
25	EFF6-25	add(sub(l3, l4), l4)	0	0	0	0	0	0
26	EFF6-26	pow(l4, sub(l3, add(l3, l3)))	8	5.902	4.893	5.7435	4.325	20.8635
27	EFF6-27	pow(add(-1, pow(add(l2, l2), pow(l2, l4))), sub(l1, l4))	9	6.249	4.978	6.679	4.4845	22.3905

28	EFF6-28	add(sub(l1, add(l2, 1)), add(l2, pow(0, l2)))	16	12.1585	10.2505	13.133	8.642	44.184
29	EFF6-29	abs(protectedDiv(sub(l3, l2), l2))	4	2.793	2.2	3.074	2.253	10.32
30	EFF6-30	add(l4, mul(l1, l1))	18	13.507	11.2775	14.655	9.5605	49
31	EFF6-31	pow(l4, sub(pow(l3, l2), l4))	5	3.419	2.674	3.802	2.526	12.421
32	EFF6-32	add(l3, l2)	21	16.3785	14.0265	16.836	11.6055	58.8465
33	EFF6-33	add(sub(l1, l4), mul(add(l3, sub(l1, l4)), l1))	16	12.641	10.8675	13.2595	9.9835	46.7515
34	EFF6-34	abs(sub(-1, protectedNeg(sub(l4, l1))))	16	12.8215	11.142	13.4335	10.3565	47.7535
35	EFF6-35	add(abs(l1), mul(add(l3, l4), l1))	8	5.934	4.9995	5.909	4.61	21.4525
36	EFF6-36	add(sub(l1, l4), mul(add(l3, l4), protectedDiv(l4, l4)))	18	14.532	12.538	11.781	11.013	49.864
37	EFF6-37	pow(l4, l1)	9	6.717	5.515	5.831	4.974	23.037
38	EFF6-38	pow(protectedDiv(l1, protectedDiv(0, pow(l3, add(abs(l4), protectedDiv(l3, l2))))), l3)	0	0	0	0	0	0
39	EFF6-39	add(sub(l1, l4), mul(add(l3, l4), protectedDiv(l4, l4)))	18	14.532	12.538	11.781	11.013	49.864
40	EFF6-40	pow(l1, sub(l1, sub(l1, add(l2, 1))))	14	10.637	9.0095	10.18	7.877	37.7035
41	EFF6-41	pow(protectedDiv(l2, protectedDiv(0, l4)), l3)	0	0	0	0	0	0
42	EFF6-42	sub(add(l1, l3), l4)	5	3.81	3.21	3.91	3.26	14.19
43	EFF6-43	protectedDiv(l2, abs(add(l3, l4)))	14	10.615	8.7855	8.3445	7.5055	35.2505
44	EFF6-44	pow(abs(protectedDiv(l4, l2)), sub(l4, l4))	0	0	0	0	0	0
45	EFF6-45	abs(protectedDiv(mul(add(l3, l4), protectedDiv(l4, l4)), l2))	18	14.532	12.538	11.781	11.013	49.864
46	EFF6-46	mul(protectedNeg(protectedNeg(abs(l4))), protectedDiv(l3, l4))	14	10.9895	9.3635	9.5215	8.1135	37.988
47	EFF6-47	pow(l4, sub(l3, l1))	4	3.066	2.5435	2.958	2.1785	10.746
48	EFF6-48	sub(sub(l3, l4), l2)	0	0	0	0	0	0
49	EFF6-49	protectedDiv(abs(l4), protectedDiv(l4, l3))	14	10.9895	9.3635	9.5215	8.1135	37.988
50	EFF6-50	protectedDiv(l3, l4)	13	9.9675	8.4395	9.0855	7.3345	34.827
51	EFF6-51	pow(add(l3, sub(l1, protectedNeg(l4))), pow(l2, l1))	9	6.437	5.189	6.463	4.669	22.758
52	EFF6-52	add(sub(add(sub(l1, l4), pow(l3, l2)), l2), l4)	10	7.093	5.66	7.5145	4.8815	25.149
53	EFF6-53	pow(l4, l4)	0	0	0	0	0	0
54	EFF6-54	protectedDiv(protectedDiv(l3, l4), mul(l4, l3))	7	5.237	4.3705	5.24	4.021	18.8685
55	EFF6-55	add(sub(l1, l4), mul(l1, sub(l3, l4)))	12	8.908	7.3795	9.117	6.5735	31.978
56	EFF6-56	pow(l4, sub(l4, pow(l3, l1)))	8	5.902	4.893	5.7435	4.325	20.8635
57	EFF6-57	add(l3, mul(add(l3, l4), protectedDiv(l1, l2)))	8	5.818	4.822	5.965	4.302	20.907



58	EFF6-58	$\text{pow}(\text{add}(-1, l2), \text{sub}(l2, \text{add}(l2, 1)))$	5	3.81	3.21	3.91	3.26	14.19
59	EFF6-59	$\text{sub}(\text{pow}(l2, \text{add}(\text{abs}(l4), \text{protectedDiv}(l3, l2))), l2)$	9	7.727	7.0155	8.456	7.149	30.3475
60	EFF6-60	$\text{protectedNeg}(\text{add}(l2, l2))$	5	3.419	2.674	3.802	2.526	12.421
61	EFF6-61	$\text{add}(\text{abs}(l4), \text{mul}(l2, l1))$	6	4.594	3.814	4.1615	2.9805	15.55
62	EFF6-62	$\text{add}(\text{sub}(l1, l1), \text{mul}(l2, l4))$	0	0	0	0	0	0
63	EFF6-63	$\text{protectedDiv}(\text{protectedDiv}(l3, l2), \text{mul}(l4, l3))$	0	0	0	0	0	0
64	EFF6-64	$\text{mul}(\text{protectedNeg}(\text{protectedNeg}(\text{abs}(l1))), \text{protectedDiv}(l3, l4))$	7	5.325	4.453	5.392	4.236	19.406
65	EFF6-65	$\text{add}(\text{protectedDiv}(\text{pow}(l3, \text{mul}(\text{protectedNeg}(l1), l3))), l3, \text{mul}(l3, l2))$	9	7.33	6.38	6.89	5.83	26.43
66	EFF6-66	$\text{sub}(l1, l2)$	16	12.1585	10.2505	13.133	8.642	44.184
67	EFF6-67	$l3$	0	0	0	0	0	0
68	EFF6-68	$\text{protectedDiv}(l3, \text{sub}(l4, l2))$	7	5.223	4.297	5.07	3.553	18.143
69	EFF6-69	$\text{pow}(\text{sub}(l3, \text{pow}(l3, l1)), \text{sub}(l1, l4))$	16	12.6795	10.8935	10.9315	9.6135	44.118
70	EFF6-70	$\text{pow}(\text{abs}(l4), \text{sub}(l1, \text{protectedDiv}(l3, \text{protectedDiv}(0, l4))))$	18	14.532	12.538	11.781	11.013	49.864
71	EFF6-71	$\text{pow}(\text{abs}(l2), 1)$	5	3.81	3.21	3.91	3.26	14.19
72	EFF6-72	$\text{sub}(\text{pow}(l4, l1), 0)$	9	6.717	5.515	5.831	4.974	23.037
73	EFF6-73	$\text{pow}(\text{abs}(l4), \text{protectedDiv}(0, l4))$	18	14.532	12.538	11.781	11.013	49.864
74	EFF6-74	$\text{pow}(\text{abs}(\text{protectedDiv}(l4, l2)), \text{sub}(l1, l4))$	16	12.95	11.24	11.02	9.94	45.15
75	EFF6-75	$\text{pow}(\text{abs}(\text{add}(\text{abs}(l4), \text{protectedDiv}(l3, l2))), \text{sub}(l1, l4))$	7	5.2435	4.3205	5.308	3.936	18.808
76	EFF6-76	$\text{protectedDiv}(l3, l4)$	13	9.9675	8.4395	9.0855	7.3345	34.827
77	EFF6-77	$\text{sub}(\text{pow}(l2, \text{add}(\text{abs}(l4), \text{protectedDiv}(l3, l2))), l2)$	9	7.727	7.0155	8.456	7.149	30.3475
78	EFF6-78	$\text{protectedDiv}(\text{pow}(\text{sub}(l1, l4), l2), \text{sub}(\text{sub}(l4, 1), \text{add}(l2, l3)))$	16	12.555	10.808	12.01	9.997	45.37
79	EFF6-79	$\text{pow}(l4, \text{sub}(l3, \text{pow}(l3, l1)))$	5	3.573	2.837	3.85	2.573	12.833
80	EFF6-80	$\text{add}(\text{sub}(l1, l4), \text{mul}(\text{sub}(l1, l4), l2))$	7	5.409	4.6295	5.752	4.382	20.1725
81	EFF6-81	$\text{add}(\text{sub}(l3, l4), \text{mul}(\text{add}(-1, l4), l1))$	7	5.383	4.569	5.387	4.407	19.746
82	EFF6-82	$\text{protectedDiv}(0, l2)$	9	6.5195	5.3405	7.2905	4.5315	23.682
83	EFF6-83	$\text{add}(l4, \text{mul}(l3, l1))$	18	13.667	11.4875	14.315	9.7005	49.17
84	EFF6-84	$\text{add}(l1, l1)$	0	0	0	0	0	0
85	EFF6-85	$\text{pow}(\text{abs}(l2), \text{sub}(\text{add}(l1, l3), \text{protectedDiv}(l4, -1)))$	5	3.81	3.21	3.91	3.26	14.19
86	EFF6-86	$\text{pow}(\text{sub}(l3, l4), \text{pow}(l2, l1))$	16	12.117	10.118	11.129	8.6655	42.0295
87	EFF6-87	$\text{mul}(\text{protectedNeg}(\text{protectedNeg}(l3)), \text{protectedDiv}(l3, l4))$	13	9.9675	8.4395	9.0855	7.3345	34.827

88	EFF6-88	sub(l3, l2)	15	11.4285	9.6605	12.483	8.272	41.844
89	EFF6-89	pow(protectedDiv(l1, protectedDiv(0, l4)), l3)	9	7.67	6.86	6.69	6.3	27.52
90	EFF6-90	pow(pow(l3, l4), sub(protectedDiv(l1, protectedDiv(0, l4)), l4))	5	3.781	3.128	3.9715	2.996	13.8765
91	EFF6-91	add(sub(l3, l2), l3)	17	12.777	10.6975	13.865	9.1305	46.47
92	EFF6-92	protectedNeg(l3)	0	0	0	0	0	0
93	EFF6-93	pow(l3, sub(l1, l2))	14	10.7505	9.0445	11.5765	7.483	38.8545
94	EFF6-94	add(sub(l3, l4), protectedNeg(protectedDiv(sub(l3, l2), l4)))	5	3.419	2.674	3.802	2.526	12.421
95	EFF6-95	pow(mul(l2, l2), l4)	5	3.81	3.21	3.91	3.26	14.19
96	EFF6-96	pow(l4, sub(l1, l4))	9	6.717	5.515	5.831	4.974	23.037
97	EFF6-97	pow(add(l3, l1), pow(l2, l1))	13	10.3995	8.9735	9.1815	8.1635	36.718
98	EFF6-98	add(sub(l1, l4), l4)	0	0	0	0	0	0
99	EFF6-99	add(sub(l1, l4), mul(l4, l2))	16	12.8215	11.142	13.4335	10.3565	47.7535
100	EFF6-100	protectedNeg(protectedNeg(-1))	0	0	0	0	0	0
101	EFF6-101	add(sub(l3, l2), l4)	16	12.1585	10.2405	13.273	8.702	44.374
102	EFF6-102	add(protectedDiv(pow(l3, l3), l3), l1)	0	0	0	0	0	0
103	EFF6-103	pow(abs(l2), sub(l3, l4))	3	2.29	1.9	2.09	2.01	8.29
104	EFF6-104	protectedNeg(l2)	5	3.419	2.674	3.802	2.526	12.421
105	EFF6-105	sub(add(add(l3, l3), l1), l4)	21	16.3785	14.0265	16.836	11.6055	58.8465
106	EFF6-106	add(l3, l2)	21	16.3785	14.0265	16.836	11.6055	58.8465
107	EFF6-107	pow(l3, sub(l1, pow(l2, abs(l4))))	14	10.7505	9.0445	11.5765	7.483	38.8545
108	EFF6-108	add(protectedDiv(pow(l3, l2), l3), mul(l3, mul(l1, l4)))	4	2.889	2.3145	3.159	2.107	10.4695
109	EFF6-109	pow(protectedDiv(0, l4), protectedDiv(l1, l2))	4	3.024	2.528	3.05	2.373	10.975
110	EFF6-110	pow(add(l3, l3), pow(l2, l1))	13	10.2705	8.776	8.3305	7.36	34.737
111	EFF6-111	protectedDiv(protectedDiv(l3, l2), mul(l4, l3))	0	0	0	0	0	0
112	EFF6-112	add(sub(l3, l2), l1)	5	3.419	2.674	3.802	2.526	12.421
113	EFF6-113	pow(add(-1, l2), sub(l3, l2))	9	6.963	5.87	7.204	5.803	25.84
114	EFF6-114	add(sub(0, l2), protectedNeg(l1))	15	11.4285	9.6605	12.483	8.272	41.844
115	EFF6-115	add(sub(l1, l4), mul(l1, 0))	16	12.8215	11.142	13.4335	10.3565	47.7535
116	EFF6-116	sub(pow(l4, -1), 0)	5	3.81	3.21	3.91	3.26	14.19
117	EFF6-117	sub(pow(l3, l4), sub(l4, l1))	7	5.223	4.27	5.484	3.993	18.97
118	EFF6-118	sub(pow(-1, -1), abs(l4))	5	3.81	3.21	3.91	3.26	14.19
119	EFF6-119	l1	0	0	0	0	0	0

120	EFF6-120	add(sub(l3, sub(l1, l4)), mul(add(l3, l4), l1))	16	12.0575	10.0755	13.068	8.4815	43.6825
121	EFF6-121	l4	5	3.419	2.674	3.802	2.526	12.421
122	EFF6-122	pow(add(-1, l3), pow(l2, l1))	12	9.5805	8.246	7.7405	6.99	32.557
123	EFF6-123	pow(protectedDiv(0, l4), l1)	9	7.1	5.99	6.08	5.25	24.42
124	EFF6-124	add(add(l3, l3), mul(add(l3, l4), l1))	19	14.732	12.661	16.174	11.987	55.554
125	EFF6-125	pow(protectedDiv(1, protectedDiv(0, l4)), l3)	16	12.452	10.468	10.341	9.593	42.854
126	EFF6-126	sub(protectedDiv(abs(l2), pow(l1, 0)), l2)	0	0	0	0	0	0
127	EFF6-127	protectedDiv(pow(sub(add(l4, 0), sub(l3, l2)), l4), sub(sub(l4, 1), add(l2, pow(0, l2))))	7	5.492	4.684	5.421	3.932	19.529
128	EFF6-128	pow(add(-1, pow(l4, pow(l2, l4))), sub(l1, l4))	8	5.792	4.804	5.905	4.209	20.71
129	EFF6-129	add(l3, protectedNeg(l1))	0	0	0	0	0	0
130	EFF6-130	add(sub(l3, l4), protectedNeg(protectedDiv(l2, l4)))	7	5.492	4.684	5.421	3.932	19.529
131	EFF6-131	pow(l3, sub(pow(sub(add(l3, 0), sub(l3, l2)), l4), pow(l2, l4)))	0	0	0	0	0	0
132	EFF6-132	pow(add(l3, abs(l2)), pow(-1, l4))	8	5.695	4.543	6.002	4.106	20.346
133	EFF6-133	add(l4, mul(l2, protectedDiv(l3, l4)))	7	5.227	4.3705	5.23	4.021	18.8485
134	EFF6-134	mul(protectedNeg(mul(l3, l2)), protectedDiv(l3, l4))	5	3.419	2.674	3.802	2.526	12.421
135	EFF6-135	protectedDiv(l2, l4)	5	3.81	3.21	3.91	3.26	14.19
136	EFF6-136	add(l4, l1)	16	12.1585	10.2505	13.133	8.642	44.184
137	EFF6-137	pow(mul(l2, protectedDiv(sub(l3, l2), l4)), l4)	5	3.81	3.21	3.91	3.26	14.19
138	EFF6-138	sub(protectedDiv(abs(l4), pow(l1, 0)), abs(l4))	0	0	0	0	0	0
139	EFF6-139	pow(l4, l3)	5	3.419	2.674	3.802	2.526	12.421
140	EFF6-140	add(protectedDiv(pow(l3, l2), l3), l2)	9	6.293	4.97	6.6845	4.3715	22.319
141	EFF6-141	protectedDiv(protectedDiv(-1, l1), mul(l4, l3))	8	5.9065	4.8985	6.3905	4.377	21.5725
142	EFF6-142	pow(protectedDiv(l4, abs(l2)), add(l2, 1))	5	3.419	2.674	3.802	2.526	12.421
143	EFF6-143	pow(protectedDiv(0, l2), l1)	8	5.91	4.74	5.23	4.37	20.25
144	EFF6-144	add(sub(l1, l1), mul(l2, pow(l3, l4)))	5	3.81	3.21	3.91	3.26	14.19
145	EFF6-145	abs(sub(l1, protectedNeg(sub(l4, l2))))	21	15.969	13.634	15.467	11.354	56.424
146	EFF6-146	l4	5	3.419	2.674	3.802	2.526	12.421
147	EFF6-147	pow(protectedDiv(0, l1), l1)	0	0	0	0	0	0
148	EFF6-148	sub(add(l3, l1), l4)	5	3.81	3.21	3.91	3.26	14.19
149	EFF6-149	mul(pow(mul(l3, l3), l2), l2)	10	7.487	6.1905	7.71	5.841	27.2285
150	EFF6-150	abs(add(l2, sub(l1, l4)))	25	18.6525	15.621	19.64	13.3145	67.228

151	EFF6-151	protectedDiv(protectedDiv(l1, l4), mul(l4, l3))	9	6.293	4.98	6.6945	4.3715	22.339
152	EFF6-152	pow(add(l3, l2), pow(l2, l1))	15	11.159	9.231	10.242	7.931	38.563
153	EFF6-153	add(sub(l1, add(l1, 1)), mul(l3, l2))	10	7.487	6.1905	7.71	5.841	27.2285
154	EFF6-154	protectedDiv(l3, l1)	0	0	0	0	0	0
155	EFF6-155	l4	5	3.419	2.674	3.802	2.526	12.421
156	EFF6-156	protectedDiv(protectedDiv(l3, l4), l4)	13	9.9675	8.4395	9.0855	7.3345	34.827
157	EFF6-157	protectedNeg(mul(l1, -1))	0	0	0	0	0	0
158	EFF6-158	-1	0	0	0	0	0	0
159	EFF6-159	add(sub(l1, l1), mul(l2, pow(l3, l2)))	10	7.487	6.1905	7.71	5.841	27.2285
160	EFF6-160	protectedDiv(l4, l4)	18	14.532	12.538	11.781	11.013	49.864

The values of FVe and fitness score of individuals in Generation 7 (on training set)

id	EFF	Experssion	FVe	fitness score				
				FMI	JC	PR	RR	SUMFs
1	EFF7-1	add(sub(l1, l4), mul(l1, 0))	24	18.3785	15.544	19.6685	13.0155	66.6065
2	EFF7-2	protectedDiv(protectedDiv(l4, l1), mul(l4, l3))	14	10.7925	9.133	9.3975	8.1625	37.4855
3	EFF7-3	pow(sub(l3, l4), pow(l2, l1))	18	13.341	11.036	12.452	9.1425	45.9715
4	EFF7-4	sub(pow(-1, -1), abs(l4))	9	6.732	5.588	7.069	4.834	24.223
5	EFF7-5	add(sub(l1, l4), mul(add(l3, l4), protectedDiv(l4, l4)))	18	14.532	12.538	11.781	11.013	49.864
6	EFF7-6	add(sub(l1, l4), mul(l1, protectedDiv(l3, l4)))	19	13.523	10.945	14.325	8.415	47.208
7	EFF7-7	protectedDiv(protectedDiv(l3, l4), l4)	14	10.7075	9.0395	9.9855	7.7245	37.457
8	EFF7-8	pow(add(sub(l4, l1), l4), pow(l2, l1))	15	10.821	8.842	11.526	6.8255	38.0145
9	EFF7-9	add(sub(l1, l4), mul(add(l3, l4), l1))	16	11.762	9.7135	12.678	7.899	42.0525
10	EFF7-10	pow(add(-1, l2), sub(l3, l2))	16	12.1535	10.1035	12.8275	8.66	43.7445
11	EFF7-11	pow(l4, protectedDiv(0, l4))	18	14.532	12.538	11.781	11.013	49.864
12	EFF7-12	add(sub(l1, add(l1, l4)), mul(l3, l2))	11	8.148	6.7015	8.617	5.8425	29.309
13	EFF7-13	add(sub(l1, l1), mul(l2, pow(l4, l2)))	0	0	0	0	0	0
14	EFF7-14	abs(l3)	0	0	0	0	0	0
15	EFF7-15	add(l4, mul(l4, l1))	9	6.549	5.284	7.302	4.426	23.561
16	EFF7-16	abs(sub(-1, protectedNeg(sub(l4, l2))))	9	6.732	5.588	7.069	4.834	24.223
17	EFF7-17	add(add(sub(l1, sub(l1, add(l2, 1))), l3), mul(add(l3, l4), l1))	20	15.08	12.633	15.999	10.352	54.064
18	EFF7-18	add(sub(l4, l1), abs(l4))	21	15.8065	13.1645	16.912	10.559	56.442
19	EFF7-19	add(sub(l3, l2), add(l3, l3))	22	16.425	13.6215	17.504	10.9875	58.538
20	EFF7-20	add(sub(l1, l4), mul(add(l1, sub(l1, l4)), l1))	23	17.7045	14.977	18.951	12.6775	64.31
21	EFF7-21	protectedDiv(l2, abs(add(l3, l4)))	15	11.335	9.3555	9.2645	7.9355	37.8905
22	EFF7-22	mul(protectedNeg(protectedNeg(abs(l4))), pow(protectedNeg(l1), add(l1, l3)))	13	9.86	8.253	9.1465	7.1195	34.379
23	EFF7-23	pow(protectedDiv(sub(l1, l2), l2), l1)	10	7.2325	5.8905	7.0135	4.888	25.0245
24	EFF7-24	pow(l4, sub(l3, add(l3, l3)))	13	9.535	7.874	9.5865	6.322	33.3175
25	EFF7-25	abs(add(l2, sub(l1, l4)))	26	19.3555	16.2005	20.419	13.6945	69.6695
26	EFF7-26	pow(protectedDiv(0, l2), abs(l2))	10	7.127	5.698	7.861	4.563	25.249
27	EFF7-27	pow(abs(l4), sub(l1, l4))	10	7.356	6.01	6.551	5.226	25.143
28	EFF7-28	add(sub(l1, l4), mul(1, l2))	22	16.753	14.0385	18.1185	11.412	60.322

29	EFF7-29	add(pow(l2, sub(add(l1, l3), protectedDiv(l4, -1))), l2)	9	6.732	5.588	7.069	4.834	24.223
30	EFF7-30	protectedDiv(l2, abs(add(l1, l4)))	11	8.148	6.7015	8.617	5.8425	29.309
31	EFF7-31	add(pow(l2, protectedDiv(l3, 1)), l2)	9	6.742	5.588	7.079	4.834	24.243
32	EFF7-32	add(abs(l4), mul(add(l3, l4), protectedDiv(l4, l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
33	EFF7-33	protectedDiv(l4, l2)	10	7.127	5.698	7.861	4.563	25.249
34	EFF7-34	add(add(l3, l3), mul(add(l3, sub(l1, l4)), l1))	35	26.4705	22.5275	27.2075	19.151	95.3565
35	EFF7-35	sub(add(abs(l4), l1), l4)	0	0	0	0	0	0
36	EFF7-36	sub(pow(l2, add(abs(l4), protectedDiv(l3, l2))), l3)	18	13.549	11.29	14.326	9.024	48.189
37	EFF7-37	protectedDiv(add(l2, 1), l4)	9	6.732	5.588	7.069	4.834	24.223
38	EFF7-38	add(sub(abs(l2), l4), mul(l1, 0))	9	6.732	5.588	7.069	4.834	24.223
39	EFF7-39	pow(abs(protectedDiv(l4, l2)), sub(l1, l4))	20	15.588	13.3125	13.947	11.1545	54.002
40	EFF7-40	add(l2, l2)	9	6.732	5.588	7.069	4.834	24.223
41	EFF7-41	add(l1, sub(mul(l1, l2), protectedDiv(l1, l4)))	10	7.332	5.985	6.512	5.21	25.039
42	EFF7-42	pow(sub(l3, l4), l4)	16	12.278	10.281	12.544	7.828	42.931
43	EFF7-43	add(sub(l1, 1), mul(l4, l2))	0	0	0	0	0	0
44	EFF7-44	add(l2, pow(l2, l1))	11	8.7625	7.549	8.359	6.523	31.1935
45	EFF7-45	pow(l1, sub(l1, sub(l1, add(mul(add(l3, sub(l1, l4)), l1), 1))))	20	15.442	13.092	14.903	11.111	54.548
46	EFF7-46	pow(abs(l1), protectedDiv(0, l4))	18	13.506	11.1945	11.1125	9.9375	45.7505
47	EFF7-47	add(sub(l1, l1), mul(l2, pow(mul(add(l3, l4), l1), l2)))	13	10.1025	8.52	8.872	7.934	35.4285
48	EFF7-48	add(sub(l1, add(l2, 1)), add(l2, pow(0, l2)))	21	15.8065	13.1745	16.772	10.499	56.252
49	EFF7-49	add(sub(l1, l4), mul(l1, 0))	24	18.3785	15.544	19.6685	13.0155	66.6065
50	EFF7-50	protectedDiv(l2, l2)	17	12.2405	10.0005	13.0075	7.572	42.8205
51	EFF7-51	pow(protectedDiv(l1, abs(l2)), add(l2, 1))	14	10.23	8.3745	10.247	6.9675	35.819
52	EFF7-52	pow(l3, sub(0, l2))	15	11.106	9.0275	11.656	7.1565	38.946
53	EFF7-53	add(protectedDiv(sub(protectedNeg(0), protectedNeg(l1)), l3), mul(l3, l2))	15	10.64	8.486	11.233	6.545	36.904
54	EFF7-54	pow(add(l3, abs(l2)), pow(l3, l2))	12	9.3495	7.9935	9.0415	7.1335	33.518
55	EFF7-55	protectedDiv(l2, abs(add(l2, l4)))	9	6.732	5.588	7.069	4.834	24.223
56	EFF7-56	pow(add(-1, l3), pow(l2, l3))	15	11.093	9.1195	11.572	7.757	39.5415
57	EFF7-57	protectedDiv(l4, l2)	10	7.127	5.698	7.861	4.563	25.249
58	EFF7-58	mul(add(l3, sub(l1, l4)), l2)	9	6.732	5.588	7.069	4.834	24.223
59	EFF7-59	abs(protectedDiv(mul(add(0, l4), protectedDiv(l4, l4)), l2))	18	14.532	12.538	11.781	11.013	49.864

60	EFF7-60	add(pow(l2, l4), sub(l3, add(l3, l3)))	24	18.3785	15.544	19.6685	13.0155	66.6065
61	EFF7-61	pow(l2, sub(l1, sub(l1, add(l2, 1))))	9	6.732	5.588	7.069	4.834	24.223
62	EFF7-62	add(l3, l2)	27	20.4345	17.228	21.5035	13.588	72.754
63	EFF7-63	add(sub(l1, l4), mul(add(l3, l4), protectedDiv(l4, l4)))	18	14.532	12.538	11.781	11.013	49.864
64	EFF7-64	protectedDiv(abs(mul(l2, l1)), abs(add(l3, l4)))	13	9.8535	8.2205	8.5755	7.0365	33.686
65	EFF7-65	add(add(l3, l3), mul(0, l1))	0	0	0	0	0	0
66	EFF7-66	add(abs(l1), mul(add(l3, l4), l1))	11	8.094	6.7785	8.083	5.914	28.8695
67	EFF7-67	protectedDiv(abs(add(l3, l3)), protectedDiv(l4, l3))	14	10.7075	9.0395	9.9855	7.7245	37.457
68	EFF7-68	mul(pow(l3, l2), add(l3, l4))	12	9.153	7.6805	8.8075	6.739	32.38
69	EFF7-69	mul(protectedNeg(protectedNeg(abs(l1))), protectedDiv(l3, l4))	17	12.394	10.132	12.792	7.998	43.316
70	EFF7-70	protectedDiv(pow(sub(l1, l4), l2), sub(sub(l4, 1), add(l2, l3)))	18	13.814	11.7525	13.4895	10.5645	49.6205
71	EFF7-71	pow(abs(l2), sub(add(l1, l3), protectedDiv(l4, -1)))	9	6.732	5.588	7.069	4.834	24.223
72	EFF7-72	add(l2, mul(l3, l1))	22	15.997	13.052	16.831	10.741	56.621
73	EFF7-73	add(sub(l1, add(l1, 1)), mul(l3, protectedDiv(l4, l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
74	EFF7-74	pow(l3, sub(l1, l2))	20	15.0825	12.5005	16.0325	9.6155	53.231
75	EFF7-75	pow(l1, sub(l1, l1))	0	0	0	0	0	0
76	EFF7-76	pow(add(add(l3, l3), sub(l1, protectedNeg(l4))), pow(l2, l1))	14	10.043	8.057	10.841	6.543	35.484
77	EFF7-77	pow(abs(l2), 1)	9	6.732	5.588	7.069	4.834	24.223
78	EFF7-78	sub(add(l2, sub(l1, l4)), abs(l4))	19	14.442	12.0895	15.3455	9.941	51.818
79	EFF7-79	add(abs(l1), mul(add(l3, l4), l1))	11	8.094	6.7785	8.083	5.914	28.8695
80	EFF7-80	pow(add(l3, l1), l1)	0	0	0	0	0	0
81	EFF7-81	abs(add(l2, sub(l2, l4)))	9	6.732	5.588	7.069	4.834	24.223
82	EFF7-82	add(add(l3, l4), l2)	0	0	0	0	0	0
83	EFF7-83	pow(l4, mul(l1, sub(l3, l4)))	10	7.356	6.01	6.551	5.226	25.143
84	EFF7-84	pow(add(-1, l3), pow(l2, l2))	0	0	0	0	0	0
85	EFF7-85	abs(sub(l1, protectedNeg(l2)))	24	18.3785	15.544	19.6685	13.0155	66.6065
86	EFF7-86	abs(sub(l1, protectedNeg(sub(l4, l2))))	23	17.264	14.6335	16.9685	11.899	60.765
87	EFF7-87	protectedDiv(l2, l4)	9	6.732	5.588	7.069	4.834	24.223
88	EFF7-88	add(sub(l3, l2), l2)	0	0	0	0	0	0
89	EFF7-89	protectedDiv(abs(l4), protectedDiv(l4, l3))	17	13.1535	11.0955	11.8815	9.2565	45.387
90	EFF7-90	add(l4, mul(l3, l4))	14	10.618	8.841	10.844	6.668	36.971

91	EFF7-91	pow(l1, sub(l1, sub(l1, add(l2, add(l4, l2))))))	15	11.417	9.6695	11.18	8.397	40.6635
92	EFF7-92	pow(add(l3, l4), pow(l4, l1))	14	10.539	8.7425	10.4975	6.6865	36.4655
93	EFF7-93	add(abs(l2), l1)	24	18.3785	15.544	19.6685	13.0155	66.6065
94	EFF7-94	add(protectedDiv(pow(l3, mul(protectedNeg(l1), l3)), l3), mul(l3, l2))	11	8.7825	7.5595	8.141	6.564	31.047
95	EFF7-95	sub(pow(l2, add(abs(l4), protectedDiv(l3, l2))), l2)	9	7.727	7.0155	8.456	7.149	30.3475
96	EFF7-96	abs(protectedDiv(abs(l2), l2))	17	12.2405	10.0005	13.0075	7.572	42.8205
97	EFF7-97	add(sub(l1, add(l2, l4)), add(l2, pow(0, l2)))	0	0	0	0	0	0
98	EFF7-98	pow(protectedDiv(0, l4), l1)	12	9.2725	7.72	8.4255	6.389	31.807
99	EFF7-99	sub(pow(l4, l2), 0)	10	7.127	5.698	7.861	4.563	25.249
100	EFF7-100	sub(add(l3, l1), l3)	0	0	0	0	0	0
101	EFF7-101	mul(protectedNeg(protectedNeg(l3)), protectedDiv(l3, l3))	0	0	0	0	0	0
102	EFF7-102	pow(abs(l2), sub(add(l1, l3), protectedDiv(l4, l1)))	16	11.6085	9.3935	12.0955	7.468	40.5655
103	EFF7-103	add(l4, l4)	10	7.127	5.698	7.861	4.563	25.249
104	EFF7-104	abs(protectedDiv(mul(add(l3, l4), protectedDiv(l4, l4)), l2))	18	14.532	12.538	11.781	11.013	49.864
105	EFF7-105	mul(protectedNeg(protectedNeg(l3)), protectedDiv(l3, l4))	14	10.7075	9.0395	9.9855	7.7245	37.457
106	EFF7-106	protectedDiv(pow(sub(l1, l4), protectedNeg(sub(l4, l1))), sub(sub(l4, 1), add(l2, l3)))	23	17.159	14.2675	18.219	11.4925	61.138
107	EFF7-107	pow(l4, sub(l3, protectedNeg(sub(l4, l2))))	10	7.127	5.698	7.861	4.563	25.249
108	EFF7-108	pow(protectedDiv(l1, protectedDiv(0, l4)), l3)	11	9.0845	7.9825	8.34	7.0135	32.4205
109	EFF7-109	mul(pow(l2, l1), protectedDiv(l3, l4))	12	9.465	8.127	9.028	6.936	33.556
110	EFF7-110	add(sub(l1, l1), mul(l2, pow(l3, l4)))	9	6.732	5.588	7.069	4.834	24.223
111	EFF7-111	add(protectedDiv(0, l2), l1)	7	4.7785	3.756	4.85	2.784	16.1685
112	EFF7-112	add(protectedDiv(pow(l3, mul(protectedNeg(l1), l3)), l3), mul(l3, l2))	11	8.7825	7.5595	8.141	6.564	31.047
113	EFF7-113	add(pow(l2, sub(add(-1, -1), protectedDiv(l1, l4))), l2)	10	7.127	5.698	7.861	4.563	25.249
114	EFF7-114	add(l3, mul(add(l3, l4), protectedDiv(l1, l2)))	10	7.236	5.946	7.364	5.019	25.565
115	EFF7-115	add(sub(l1, add(l1, 1)), mul(l3, l2))	14	10.409	8.5685	10.869	7.415	37.2615
116	EFF7-116	add(-1, l2)	9	6.732	5.588	7.069	4.834	24.223
117	EFF7-117	add(sub(l3, l4), mul(add(l3, l4), l1))	20	15.08	12.633	15.999	10.352	54.064
118	EFF7-118	abs(sub(0, l2))	9	6.732	5.588	7.069	4.834	24.223
119	EFF7-119	add(sub(l3, sub(l1, l4)), mul(l4, l1))	13	9.29	7.529	9.246	5.8205	31.8855



120	EFF7-120	sub(sub(l1, sub(l1, add(l2, 1))), 0)	9	6.732	5.588	7.069	4.834	24.223
121	EFF7-121	add(l3, l2)	27	20.4345	17.228	21.5035	13.588	72.754
122	EFF7-122	protectedDiv(-1, l2)	9	6.732	5.588	7.069	4.834	24.223
123	EFF7-123	mul(pow(mul(l3, l3), l2), l2)	14	10.409	8.5685	10.869	7.415	37.2615
124	EFF7-124	add(l4, l2)	0	0	0	0	0	0
125	EFF7-125	mul(pow(l3, l2), l3)	12	9.153	7.6805	8.8075	6.739	32.38
126	EFF7-126	pow(pow(l3, l2), protectedDiv(0, l4))	18	14.542	12.538	11.791	11.023	49.894
127	EFF7-127	pow(l4, mul(l3, l2))	10	7.127	5.698	7.861	4.563	25.249
128	EFF7-128	pow(abs(protectedDiv(l4, l2)), sub(l1, l4))	20	15.588	13.3125	13.947	11.1545	54.002
129	EFF7-129	sub(pow(l1, -1), 0)	0	0	0	0	0	0
130	EFF7-130	pow(l1, sub(l1, abs(l4)))	24	17.887	14.781	18.8885	12.0595	63.616
131	EFF7-131	add(sub(l1, l4), mul(add(l3, sub(l1, l4)), l1))	23	17.7045	14.977	18.951	12.6775	64.31
132	EFF7-132	pow(add(-1, l2), sub(sub(l1, add(l2, 1)), abs(sub(l1, l2))))	9	6.732	5.588	7.069	4.834	24.223
133	EFF7-133	pow(add(-1, sub(l3, l2)), sub(l3, l2))	24	17.204	13.8455	17.4215	10.7615	59.2325
134	EFF7-134	add(sub(l3, l2), l3)	22	16.425	13.6215	17.504	10.9875	58.538
135	EFF7-135	mul(protectedNeg(protectedNeg(l2)), protectedDiv(l3, l4))	12	8.869	7.3185	9.309	6.025	31.5215
136	EFF7-136	pow(abs(l4), protectedDiv(0, l4))	18	14.532	12.538	11.781	11.013	49.864
137	EFF7-137	mul(pow(l3, l2), l2)	14	10.409	8.5685	10.869	7.415	37.2615
138	EFF7-138	add(sub(l1, l3), mul(l2, pow(l3, l2)))	17	12.4255	10.123	13.371	7.9295	43.849
139	EFF7-139	add(sub(0, l4), protectedNeg(l1))	27	20.4345	17.228	21.5035	13.588	72.754
140	EFF7-140	protectedDiv(protectedDiv(l3, l4), l4)	14	10.7075	9.0395	9.9855	7.7245	37.457
141	EFF7-141	sub(pow(-1, l2), abs(l4))	10	7.127	5.698	7.861	4.563	25.249
142	EFF7-142	add(l4, mul(l3, l1))	23	17.26	14.3805	17.911	11.5505	61.102
143	EFF7-143	mul(protectedNeg(l3), protectedDiv(l1, l3))	0	0	0	0	0	0
144	EFF7-144	sub(pow(l4, mul(l1, 0)), 0)	0	0	0	0	0	0
145	EFF7-145	mul(0, l2)	0	0	0	0	0	0
146	EFF7-146	sub(add(l3, l1), l2)	10	7.127	5.698	7.861	4.563	25.249
147	EFF7-147	pow(sub(l1, l4), pow(l2, l1))	22	16.7915	14.116	14.7835	12.019	57.71
148	EFF7-148	add(l4, mul(add(l2, 1), l1))	12	8.741	7.142	8.715	5.3615	29.9595
149	EFF7-149	pow(add(l3, sub(l1, protectedNeg(l4))), pow(l2, l1))	16	11.6085	9.3935	12.0955	7.468	40.5655
150	EFF7-150	pow(abs(l4), sub(pow(l3, mul(protectedNeg(l1, l3)), protectedDiv(l3, protectedDiv(0, l4))))	18	14.532	12.538	11.781	11.013	49.864

151	EFF7-151	pow(l3, sub(sub(l4, 1), add(l2, pow(0, l2))))	12	8.776	7.1255	9.4575	5.774	31.133
152	EFF7-152	add(sub(l1, add(sub(l4, 1), 1)), mul(l3, l2))	17	12.0745	9.6415	12.7635	7.4395	41.919
153	EFF7-153	add(l3, l2)	27	20.4345	17.228	21.5035	13.588	72.754
154	EFF7-154	pow(add(l3, sub(l1, protectedNeg(l4))), pow(l2, l3))	7	5.212	4.278	5.249	3.584	18.323
155	EFF7-155	add(sub(l4, l4), protectedNeg(protectedNeg(abs(l1))))	0	0	0	0	0	0
156	EFF7-156	add(l1, l2)	24	18.3785	15.544	19.6685	13.0155	66.6065
157	EFF7-157	add(sub(add(l3, l4), l4), mul(l4, l2))	0	0	0	0	0	0
158	EFF7-158	sub(l2, 0)	9	6.732	5.588	7.069	4.834	24.223
159	EFF7-159	protectedDiv(protectedDiv(-1, l1), mul(l3, l3))	0	0	0	0	0	0
160	EFF7-160	add(l4, mul(l3, l2))	13	9.719	8.0385	10.279	6.775	34.8115

The values of FVe and fitness score of individuals in Generation 8 (on training set)

id	EFF	Experssion	FVe	fitness score				
				FMI	JC	PR	RR	SUM <sub>FS</sub>
1	EFF8-1	l4	10	7.127	5.698	7.861	4.563	25.249
2	EFF8-2	add(l3, l2)	27	20.4345	17.228	21.5035	13.588	72.754
3	EFF8-3	add(l2, mul(l3, l1))	22	15.997	13.052	16.831	10.741	56.621
4	EFF8-4	add(add(sub(l1, sub(l1, add(l2, 1))), -1), mul(add(l3, l4), l1))	18	13.295	11.022	13.5555	8.542	46.4145
5	EFF8-5	pow(abs(l4), protectedNeg(protectedNeg(l2)))	10	7.127	5.698	7.861	4.563	25.249
6	EFF8-6	pow(protectedDiv(0, l2), abs(l2))	10	7.127	5.698	7.861	4.563	25.249
7	EFF8-7	pow(abs(1), 1)	0	0	0	0	0	0
8	EFF8-8	add(sub(l1, add(sub(l4, 1), 1)), mul(add(l3, sub(l1, l4)), l1))	23	17.7045	14.977	18.951	12.6775	64.31
9	EFF8-9	pow(l1, sub(l1, sub(l1, protectedNeg(sub(l4, l2)))))	11	8.014	6.4775	8.3405	4.7305	27.5625
10	EFF8-10	pow(l4, mul(l1, sub(l3, l4)))	10	7.356	6.01	6.551	5.226	25.143
11	EFF8-11	add(sub(l1, add(l1, 1)), mul(l3, pow(-1, -1)))	0	0	0	0	0	0
12	EFF8-12	pow(abs(l2), mul(protectedNeg(l1), l3))	9	6.679	5.606	6.851	4.4505	23.5865
13	EFF8-13	sub(pow(-1, add(l1, 1)), abs(l4))	11	8.356	7.012	8.094	6.1195	29.5815
14	EFF8-14	abs(sub(l1, l2))	20	15.0165	12.617	15.8535	10.8445	54.3315
15	EFF8-15	add(l3, mul(add(l3, l4), protectedDiv(l1, l2)))	10	7.236	5.946	7.364	5.019	25.565
16	EFF8-16	abs(sub(l1, protectedNeg(sub(add(l1, l3), protectedDiv(l4, l1)))))	25	18.8915	15.842	20.346	12.947	68.0265
17	EFF8-17	pow(protectedDiv(l1, protectedDiv(0, pow(l2, l4))), l3)	19	14.228	11.8105	12.7825	10.5515	49.3725
18	EFF8-18	pow(l3, mul(l3, l2))	14	10.4195	8.615	10.713	7.232	36.9795
19	EFF8-19	abs(protectedDiv(pow(l1, l3), add(l2, l2)))	13	9.9755	8.3725	10.3235	7.034	35.7055
20	EFF8-20	add(l3, l1)	0	0	0	0	0	0
21	EFF8-21	abs(add(l2, l1))	24	18.3785	15.544	19.6685	13.0155	66.6065
22	EFF8-22	add(sub(l1, l4), mul(add(l3, sub(l1, l4)), l1))	23	17.7045	14.977	18.951	12.6775	64.31
23	EFF8-23	abs(protectedDiv(mul(add(l3, protectedDiv(l4, l4)), protectedDiv(l4, l4)), l2))	18	14.532	12.538	11.781	11.013	49.864
24	EFF8-24	pow(l4, pow(l4, l1))	23	17.147	14.201	17.9885	11.5195	60.856
25	EFF8-25	add(sub(l4, l1), mul(l4, l1))	10	7.14	5.719	7.844	4.587	25.29
26	EFF8-26	add(l3, l1)	0	0	0	0	0	0
27	EFF8-27	pow(l4, mul(l1, sub(l3, l2)))	10	7.356	6.01	6.551	5.226	25.143

28	EFF8-28	add(pow(l2, sub(add(-1, -1), protectedDiv(l1, l4))), l2)	10	7.127	5.698	7.861	4.563	25.249
29	EFF8-29	add(abs(l2), l1)	24	18.3785	15.544	19.6685	13.0155	66.6065
30	EFF8-30	pow(l1, sub(l1, sub(abs(mul(l3, l2)), add(mul(add(l3, sub(l1, l4)), l1), 1))))	21	16.0455	13.454	16.2575	10.9675	56.7245
31	EFF8-31	pow(l1, sub(l1, abs(l1)))	0	0	0	0	0	0
32	EFF8-32	add(l1, mul(l3, l2))	17	12.0745	9.6415	12.7635	7.4395	41.919
33	EFF8-33	add(pow(l2, protectedDiv(l3, 1)), l3)	25	19.0775	16.1825	20.1075	12.869	68.2365
34	EFF8-34	add(abs(l4), mul(add(l3, l4), protectedDiv(l4, mul(l2, pow(l3, l2)))))	10	7.127	5.698	7.861	4.563	25.249
35	EFF8-35	add(sub(l1, l4), sub(l1, l3))	23	17.7045	14.977	18.951	12.6775	64.31
36	EFF8-36	add(sub(l3, l2), add(l3, l3))	22	16.425	13.6215	17.504	10.9875	58.538
37	EFF8-37	pow(abs(l4), protectedDiv(0, l3))	12	10.03	9.0105	10.707	8.787	38.5345
38	EFF8-38	protectedDiv(l2, abs(add(l2, l4)))	9	6.732	5.588	7.069	4.834	24.223
39	EFF8-39	add(l4, mul(add(l2, 1), l1))	12	8.741	7.142	8.715	5.3615	29.9595
40	EFF8-40	sub(pow(l2, add(abs(l4), protectedDiv(l3, l2))), l3)	18	13.549	11.29	14.326	9.024	48.189
41	EFF8-41	abs(add(l2, sub(l2, protectedDiv(l4, l4))))	18	14.532	12.538	11.781	11.013	49.864
42	EFF8-42	add(sub(l1, add(l2, 1)), add(l2, pow(pow(abs(l2), protectedNeg(l1)), l2)))	0	0	0	0	0	0
43	EFF8-43	add(sub(l1, l1), mul(l2, pow(l3, l4)))	9	6.732	5.588	7.069	4.834	24.223
44	EFF8-44	add(l4, mul(l3, l2))	13	9.719	8.0385	10.279	6.775	34.8115
45	EFF8-45	pow(abs(l4), sub(pow(l3, mul(protectedNeg(l1), l3)), protectedDiv(l3, protectedDiv(0, l4))))	18	14.532	12.538	11.781	11.013	49.864
46	EFF8-46	pow(add(-1, l2), sub(l4, l2))	9	6.732	5.588	7.069	4.834	24.223
47	EFF8-47	add(abs(l4), mul(add(l3, l4), protectedDiv(pow(-1, -1), l4)))	11	7.863	6.328	8.661	5.101	27.953
48	EFF8-48	abs(protectedDiv(mul(add(l3, l4), l1), l2))	11	7.958	6.5255	8.038	5.408	27.9295
49	EFF8-49	mul(l1, l2)	13	9.8535	8.2205	8.5755	7.0365	33.686
50	EFF8-50	protectedDiv(protectedDiv(l4, l1), l4)	17	13.1535	11.0955	11.8815	9.2565	45.387
51	EFF8-51	add(abs(l2), mul(1, l2))	9	6.732	5.588	7.069	4.834	24.223
52	EFF8-52	add(l2, l2)	9	6.732	5.588	7.069	4.834	24.223
53	EFF8-53	add(sub(protectedDiv(1, 1), add(l1, l4)), mul(l3, l2))	9	6.9455	5.919	6.634	5.0315	24.53
54	EFF8-54	pow(l4, protectedDiv(0, l4))	18	14.532	12.538	11.781	11.013	49.864
55	EFF8-55	add(pow(-1, l4), sub(l3, add(l3, l3)))	22	16.753	14.0385	18.1185	11.412	60.322

56	EFF8-56	$\text{pow}(\text{l1}, \text{sub}(\text{l1}, \text{abs}(\text{l4})))$	24	17.887	14.781	18.8885	12.0595	63.616
57	EFF8-57	$\text{mul}(\text{protectedNeg}(\text{protectedNeg}(\text{l3})), \text{protectedDiv}(\text{sub}(\text{l1}, \text{protectedNeg}(\text{sub}(\text{l4}, \text{l2}))), \text{l4}))$	19	13.3465	10.5825	13.938	7.963	45.83
58	EFF8-58	$\text{sub}(\text{add}(\text{l1}, \text{l1}), \text{l2})$	21	15.8065	13.1745	16.772	10.499	56.252
59	EFF8-59	$\text{add}(\text{protectedDiv}(\text{pow}(\text{l3}, \text{mul}(\text{protectedDiv}(\text{l3}, \text{l4}))), \text{l3}), \text{mul}(\text{l3}, \text{l2}))$	13	9.471	7.617	9.2285	5.209	31.5255
60	EFF8-60	$\text{protectedDiv}(\text{abs}(\text{add}(\text{l3}, \text{l3})), \text{protectedDiv}(\text{l4}, \text{l3}))$	14	10.7075	9.0395	9.9855	7.7245	37.457
61	EFF8-61	$\text{abs}(\text{add}(\text{l2}, \text{sub}(\text{l1}, \text{l4})))$	26	19.3555	16.2005	20.419	13.6945	69.6695
62	EFF8-62	$\text{pow}(\text{abs}(\text{l2}), \text{protectedDiv}(\text{l3}, \text{l4}))$	0	0	0	0	0	0
63	EFF8-63	$\text{mul}(\text{l1}, \text{protectedDiv}(\text{l3}, \text{l4}))$	17	12.394	10.132	12.792	7.998	43.316
64	EFF8-64	$\text{pow}(\text{l2}, \text{sub}(\text{l1}, \text{sub}(\text{l1}, \text{add}(\text{l2}, \text{l1}))))$	9	6.732	5.588	7.069	4.834	24.223
65	EFF8-65	$\text{pow}(\text{add}(-1, \text{l2}), \text{l1})$	8	5.7295	4.6005	6.119	3.722	20.171
66	EFF8-66	$\text{abs}(\text{protectedDiv}(\text{l2}, \text{l2}))$	17	12.2405	10.0005	13.0075	7.572	42.8205
67	EFF8-67	$\text{protectedDiv}(\text{l2}, \text{abs}(\text{sub}(\text{pow}(\text{l3}, \text{mul}(\text{protectedNeg}(\text{l1}, \text{l3})), \text{protectedDiv}(\text{l3}, \text{protectedDiv}(\text{l3}, \text{protectedDiv}(\text{l3}, \text{l4}))))))$	16	13.032	11.258	10.031	9.793	44.114
68	EFF8-68	$\text{pow}(\text{l3}, \text{sub}(\text{sub}(\text{l4}, \text{l1}), \text{add}(\text{l2}, \text{pow}(\text{l2}, \text{l2}))))$	12	8.776	7.1255	9.4575	5.774	31.133
69	EFF8-69	$\text{abs}(\text{l3})$	0	0	0	0	0	0
70	EFF8-70	$\text{abs}(\text{protectedDiv}(\text{mul}(\text{add}(\text{l3}, \text{l4}), \text{protectedDiv}(\text{l4}, \text{l4})), \text{l2}))$	18	14.532	12.538	11.781	11.013	49.864
71	EFF8-71	$\text{protectedDiv}(\text{add}(\text{l2}, \text{l1}), \text{protectedDiv}(\text{l4}, \text{l3}))$	14	10.7075	9.0395	9.9855	7.7245	37.457
72	EFF8-72	$\text{add}(\text{sub}(\text{l1}, \text{l1}), \text{mul}(\text{l2}, \text{pow}(\text{l3}, \text{l3})))$	11	8.178	6.7215	8.347	5.6925	28.939
73	EFF8-73	$\text{pow}(\text{l2}, \text{sub}(\text{l1}, \text{sub}(\text{l1}, \text{add}(\text{l2}, \text{sub}(\text{l3}, \text{l2}))))))$	9	6.742	5.588	7.079	4.834	24.243
74	EFF8-74	$\text{pow}(\text{abs}(\text{l1}), \text{protectedDiv}(\text{pow}(\text{l2}, \text{l2}), \text{l4}))$	11	8.098	6.567	7.841	4.709	27.215
75	EFF8-75	$\text{pow}(\text{l4}, \text{protectedDiv}(\text{l3}, \text{l3}))$	10	7.127	5.698	7.861	4.563	25.249
76	EFF8-76	$\text{add}(\text{l1}, \text{l2})$	24	18.3785	15.544	19.6685	13.0155	66.6065
77	EFF8-77	$\text{pow}(\text{l4}, \text{mul}(\text{l1}, \text{sub}(\text{l1}, \text{l4})))$	10	7.356	6.01	6.551	5.226	25.143
78	EFF8-78	$\text{mul}(\text{protectedNeg}(\text{protectedNeg}(\text{mul}(\text{l3}, \text{l1}))), \text{protectedDiv}(\text{l3}, \text{l4}))$	17	12.095	9.849	13.064	7.63	42.638
79	EFF8-79	$\text{mul}(\text{pow}(\text{mul}(\text{l3}, \text{l4}), \text{l2}), \text{l2})$	0	0	0	0	0	0
80	EFF8-80	$\text{pow}(\text{protectedDiv}(\text{l1}, \text{abs}(\text{l2})), \text{add}(\text{l3}, \text{l1}))$	14	10.23	8.3745	10.247	6.9675	35.819
81	EFF8-81	$\text{add}(\text{l3}, \text{l1})$	0	0	0	0	0	0
82	EFF8-82	$\text{add}(\text{sub}(\text{l4}, \text{l1}), \text{abs}(\text{l4}))$	21	15.8065	13.1645	16.912	10.559	56.442
83	EFF8-83	$\text{pow}(\text{l2}, \text{l3})$	9	6.742	5.588	7.079	4.834	24.243

84	EFF8-84	pow(protectedDiv(0, l2), abs(l4))	17	12.2405	10.0005	13.0075	7.572	42.8205
85	EFF8-85	add(l1, l2)	24	18.3785	15.544	19.6685	13.0155	66.6065
86	EFF8-86	pow(l4, protectedDiv(0, 0))	10	7.127	5.698	7.861	4.563	25.249
87	EFF8-87	add(pow(l2, l4), sub(l3, add(0, l3)))	9	6.732	5.588	7.069	4.834	24.223
88	EFF8-88	pow(protectedDiv(l2, protectedDiv(0, l4)), l3)	0	0	0	0	0	0
89	EFF8-89	sub(pow(add(l2, l4), -1), abs(l4))	9	6.732	5.588	7.069	4.834	24.223
90	EFF8-90	add(sub(l1, l4), mul(add(l1, sub(l1, l3)), l1))	26	20.2845	17.327	21.321	14.6875	73.62
91	EFF8-91	sub(sub(l1, sub(abs(l2), add(l2, 1))), 0)	0	0	0	0	0	0
92	EFF8-92	protectedDiv(abs(add(l3, l3)), l4)	14	10.7075	9.0395	9.9855	7.7245	37.457
93	EFF8-93	mul(add(l3, sub(l1, l4)), l2)	9	6.732	5.588	7.069	4.834	24.223
94	EFF8-94	pow(l3, 1)	0	0	0	0	0	0
95	EFF8-95	pow(protectedDiv(l1, l1), l3)	0	0	0	0	0	0
96	EFF8-96	pow(l4, l1)	10	7.356	6.01	6.551	5.226	25.143
97	EFF8-97	pow(abs(l2), sub(add(l1, l3), protectedDiv(l4, l1)))	16	11.6085	9.3935	12.0955	7.468	40.5655
98	EFF8-98	add(sub(l4, l1), abs(l3))	22	16.425	13.6215	17.504	10.9875	58.538
99	EFF8-99	pow(protectedDiv(l1, l4), l3)	17	12.066	9.763	12.865	7.511	42.205
100	EFF8-100	add(sub(l1, l4), mul(add(l3, l3), l1))	24	18.341	15.452	19.7205	12.9245	66.438
101	EFF8-101	add(mul(l3, l2), mul(add(l3, l4), protectedDiv(l1, l2)))	10	7.236	5.946	7.364	5.019	25.565
102	EFF8-102	add(sub(l1, l4), mul(1, l2))	22	16.753	14.0385	18.1185	11.412	60.322
103	EFF8-103	pow(abs(l4), sub(abs(abs(1)), l4))	10	7.127	5.698	7.861	4.563	25.249
104	EFF8-104	add(sub(l2, l4), protectedNeg(l1))	21	16.056	13.7325	16.631	11.972	58.3915
105	EFF8-105	mul(protectedNeg(protectedNeg(l2)), protectedDiv(l3, l4))	12	8.869	7.3185	9.309	6.025	31.5215
106	EFF8-106	add(l2, l2)	9	6.732	5.588	7.069	4.834	24.223
107	EFF8-107	add(l4, mul(add(l2, l3), l1))	19	14.405	11.9905	15.1695	9.072	50.637
108	EFF8-108	pow(l3, l4)	14	10.618	8.841	10.844	6.668	36.971
109	EFF8-109	add(l4, mul(l3, 0))	10	7.127	5.698	7.861	4.563	25.249
110	EFF8-110	add(sub(l1, add(l1, 1)), l3)	0	0	0	0	0	0
111	EFF8-111	pow(abs(l1), mul(l3, l2))	13	9.509	7.694	10.073	5.939	33.215
112	EFF8-112	mul(add(l3, sub(l1, l4)), l1)	34	25.7695	21.9105	26.5975	18.815	93.0925
113	EFF8-113	add(abs(l4), mul(add(l3, add(l2, sub(l1, l4))), protectedDiv(l4, l4)))	18	14.532	12.538	11.781	11.013	49.864
114	EFF8-114	pow(protectedDiv(abs(l4), l2), abs(l2))	10	7.127	5.698	7.861	4.563	25.249

115	EFF8-115	pow(l2, l4)	9	6.732	5.588	7.069	4.834	24.223
116	EFF8-116	add(pow(l2, l3), l2)	9	6.742	5.588	7.079	4.834	24.243
117	EFF8-117	add(pow(sub(l3, sub(l1, l4)), sub(add(-1, -1), protectedDiv(l1, l4))), l2)	12	9.1555	7.7335	8.8015	6.5815	32.272
118	EFF8-118	pow(protectedDiv(l2, l2), l1)	4	2.938	2.413	2.77	2.36	10.481
119	EFF8-119	sub(l4, 0)	10	7.127	5.698	7.861	4.563	25.249
120	EFF8-120	add(l2, l2)	9	6.732	5.588	7.069	4.834	24.223
121	EFF8-121	add(sub(l1, l4), mul(l1, l4))	14	10.124	8.234	10.647	6.4085	35.4135
122	EFF8-122	add(-1, l2)	9	6.732	5.588	7.069	4.834	24.223
123	EFF8-123	add(sub(l1, l3), mul(1, pow(l3, l2)))	15	11.056	9.044	11.6675	7.152	38.9195
124	EFF8-124	add(sub(l3, sub(l1, l4)), mul(l4, l1))	13	9.29	7.529	9.246	5.8205	31.8855
125	EFF8-125	add(sub(l3, l4), mul(add(l3, l4), l1))	20	15.08	12.633	15.999	10.352	54.064
126	EFF8-126	add(sub(l1, add(add(sub(l4, 1), 1), 1)), mul(l3, protectedDiv(l4, l4)))	18	14.532	12.538	11.781	11.013	49.864
127	EFF8-127	protectedDiv(l2, abs(add(l3, l4)))	15	11.335	9.3555	9.2645	7.9355	37.8905
128	EFF8-128	protectedDiv(l4, l4)	18	14.532	12.538	11.781	11.013	49.864
129	EFF8-129	add(sub(l1, l1), l4)	10	7.127	5.698	7.861	4.563	25.249
130	EFF8-130	protectedDiv(l1, l2)	14	10.23	8.3745	10.247	6.9675	35.819
131	EFF8-131	pow(protectedDiv(l1, protectedDiv(0, add(l2, l3))), l3)	0	0	0	0	0	0
132	EFF8-132	pow(mul(add(l2, 1), l1), 1)	12	9.483	8.1995	9.5145	7.272	34.469
133	EFF8-133	pow(abs(l2), protectedDiv(l3, l4))	9	6.742	5.588	7.079	4.834	24.243
134	EFF8-134	pow(l4, protectedDiv(l3, l4))	10	7.127	5.698	7.861	4.563	25.249
135	EFF8-135	0	0	0	0	0	0	0
136	EFF8-136	pow(l4, l4)	0	0	0	0	0	0
137	EFF8-137	pow(l3, sub(l1, sub(sub(l4, 1), add(l2, l3))))	23	17.8245	15.252	18.066	12.82	63.9625
138	EFF8-138	add(sub(l1, add(l2, 1)), add(l2, l4))	21	15.8065	13.1745	16.772	10.499	56.252
139	EFF8-139	add(sub(l1, l4), mul(add(l3, sub(l1, l4)), l1))	23	17.7045	14.977	18.951	12.6775	64.31
140	EFF8-140	add(sub(l1, l1), l1)	0	0	0	0	0	0
141	EFF8-141	add(pow(l2, sub(add(l4, -1), protectedDiv(l1, l4))), l2)	13	9.1205	7.257	9.5475	4.996	30.921
142	EFF8-142	pow(l3, sub(l2, l2))	0	0	0	0	0	0
143	EFF8-143	add(l4, mul(l3, l4))	14	10.618	8.841	10.844	6.668	36.971
144	EFF8-144	abs(protectedDiv(mul(add(l3, 0), protectedDiv(l4, l4)), l2))	16	13.032	11.258	10.031	9.793	44.114

145	EFF8-145	add(sub(l1, l1), mul(l2, pow(l3, l4)))	9	6.732	5.588	7.069	4.834	24.223
146	EFF8-146	add(0, mul(l4, l1))	9	6.677	5.493	5.892	4.951	23.013
147	EFF8-147	add(sub(l1, l4), mul(l2, l1))	13	9.6915	8.091	10.324	6.633	34.7395
148	EFF8-148	mul(l2, protectedDiv(l3, l4))	12	8.869	7.3185	9.309	6.025	31.5215
149	EFF8-149	pow(l4, protectedDiv(0, l4))	18	14.532	12.538	11.781	11.013	49.864
150	EFF8-150	add(l4, mul(l3, add(l3, l4)))	22	16.425	13.6215	17.504	10.9875	58.538
151	EFF8-151	mul(add(l3, sub(l1, l4)), l2)	9	6.732	5.588	7.069	4.834	24.223
152	EFF8-152	add(l4, mul(l3, l4))	14	10.618	8.841	10.844	6.668	36.971
153	EFF8-153	add(sub(l3, l4), pow(l3, l2))	9	6.965	5.9285	6.634	5.041	24.5685
154	EFF8-154	add(l1, protectedNeg(abs(l3)))	0	0	0	0	0	0
155	EFF8-155	pow(abs(l4), sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), protectedDiv(l3, protectedDiv(0, l4))))	18	14.532	12.538	11.781	11.013	49.864
156	EFF8-156	add(sub(l1, add(l1, 1)), mul(l3, protectedDiv(l4, l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
157	EFF8-157	add(l3, pow(pow(-1, l2), pow(l2, l1)))	21	15.8065	13.1645	16.912	10.559	56.442
158	EFF8-158	add(sub(l4, l1), add(l1, 1))	10	7.127	5.698	7.861	4.563	25.249
159	EFF8-159	add(sub(l1, l3), mul(l2, pow(l3, l2)))	17	12.4255	10.123	13.371	7.9295	43.849
160	EFF8-160	add(sub(l1, add(sub(l4, l4), 1)), mul(l3, l2))	17	12.0745	9.6415	12.7635	7.4395	41.919



The values of FVe and fitness score of individuals in Generation 9 (on training set)

id	EFF	Experssion	FVe	fitness score				
				FMI	JC	PR	RR	SUM <sub>FS</sub>
1	EFF9-1	add(sub(l4, l3), abs(l3))	10	7.127	5.698	7.861	4.563	25.249
2	EFF9-2	add(sub(l3, l4), mul(add(l3, l4), l1))	20	15.08	12.633	15.999	10.352	54.064
3	EFF9-3	add(abs(l4), l2)	0	0	0	0	0	0
4	EFF9-4	add(sub(l1, l4), mul(1, l4))	0	0	0	0	0	0
5	EFF9-5	pow(protectedDiv(l1, abs(l2)), add(0, l2))	17	12.4425	10.113	12.584	6.9775	42.117
6	EFF9-6	add(l4, mul(l3, l2))	13	9.719	8.0385	10.279	6.775	34.8115
7	EFF9-7	abs(l1)	0	0	0	0	0	0
8	EFF9-8	abs(protectedDiv(mul(add(l3, l4), 1), l2))	10	7.14	5.719	7.844	4.587	25.29
9	EFF9-9	pow(add(-1, l2), l1)	8	5.7295	4.6005	6.119	3.722	20.171
10	EFF9-10	protectedDiv(abs(l4), l4)	18	14.532	12.538	11.781	11.013	49.864
11	EFF9-11	mul(l1, protectedDiv(abs(-1), l4))	16	11.4455	9.1465	12.1175	7.1615	39.871
12	EFF9-12	pow(abs(l1), protectedDiv(l3, l4))	16	12.649	10.8835	10.8875	9.475	43.895
13	EFF9-13	abs(pow(l1, l3))	0	0	0	0	0	0
14	EFF9-14	pow(l4, l4)	0	0	0	0	0	0
15	EFF9-15	add(abs(l3), mul(add(l3, l4), protectedDiv(pow(-1, -1), l4)))	10	7.127	5.698	7.861	4.563	25.249
16	EFF9-16	add(l4, mul(l3, add(l3, l4)))	22	16.425	13.6215	17.504	10.9875	58.538
17	EFF9-17	sub(add(1, l1), l2)	21	15.8065	13.1745	16.772	10.499	56.252
18	EFF9-18	pow(l4, protectedDiv(l3, l4))	10	7.127	5.698	7.861	4.563	25.249
19	EFF9-19	abs(l4)	10	7.127	5.698	7.861	4.563	25.249
20	EFF9-20	pow(l1, sub(l1, sub(abs(mul(l3, l2)), add(mul(add(pow(1, l4), sub(l1, l4)), l1), 1))))	18	13.6865	11.4975	13.7135	9.1475	48.045
21	EFF9-21	abs(protectedDiv(mul(add(l3, protectedDiv(0, l4)), protectedDiv(l4, l4)), l2))	16	13.032	11.258	10.031	9.793	44.114
22	EFF9-22	pow(l1, sub(l1, abs(l4)))	24	17.887	14.781	18.8885	12.0595	63.616
23	EFF9-23	pow(l2, sub(l1, sub(l1, add(sub(l3, sub(l1, l4)), sub(l3, l2)))))	13	9.414	7.614	9.641	6.157	32.826
24	EFF9-24	add(sub(l1, add(l1, 1)), mul(l3, protectedDiv(l1, l4)))	17	12.394	10.132	12.792	7.998	43.316
25	EFF9-25	add(abs(l2), add(l3, l3))	23	17.7045	14.977	18.951	12.6775	64.31
26	EFF9-26	abs(protectedDiv(-1, l2))	10	7.127	5.698	7.861	4.563	25.249
27	EFF9-27	add(abs(l3), l1)	0	0	0	0	0	0

28	EFF9-28	pow(abs(l4), protectedNeg(0))	0	0	0	0	0	0
29	EFF9-29	add(sub(l3, l2), protectedDiv(l3, l4))	14	10.7075	9.0395	9.9855	7.7245	37.457
30	EFF9-30	l2	9	6.732	5.588	7.069	4.834	24.223
31	EFF9-31	pow(l4, l4)	0	0	0	0	0	0
32	EFF9-32	add(sub(l1, l4), l1)	23	17.7045	14.977	18.951	12.6775	64.31
33	EFF9-33	pow(sub(l1, protectedNeg(sub(add(l1, l3), protectedDiv(l4, l1)))), abs(l4))	13	9.548	7.807	10.526	6.016	33.897
34	EFF9-34	add(0, add(-1, l2))	9	6.732	5.588	7.069	4.834	24.223
35	EFF9-35	add(sub(l1, l4), add(l3, sub(l1, l4)))	22	16.753	14.0385	18.1185	11.412	60.322
36	EFF9-36	add(l1, mul(l3, l4))	15	11.106	9.0275	11.656	7.1565	38.946
37	EFF9-37	add(sub(l1, add(add(sub(l4, l4), 1), 1)), mul(l3, protectedDiv(l4, l4)))	18	14.532	12.538	11.781	11.013	49.864
38	EFF9-38	pow(protectedDiv(l1, abs(l2)), l1)	7	5.1205	4.1375	5.298	3.5925	18.1485
39	EFF9-39	add(l3, l2)	27	20.4345	17.228	21.5035	13.588	72.754
40	EFF9-40	pow(protectedDiv(l1, protectedDiv(0, pow(l2, l2))), l3)	0	0	0	0	0	0
41	EFF9-41	abs(sub(l1, protectedNeg(sub(l2, protectedDiv(l4, l1)))))	29	21.3605	17.6595	23.2065	14.076	76.3025
42	EFF9-42	add(abs(l4), mul(add(l3, l4), protectedDiv(l4, mul(l2, pow(l3, l2)))))	10	7.127	5.698	7.861	4.563	25.249
43	EFF9-43	abs(protectedDiv(mul(add(l3, 0), protectedDiv(l4, l4)), l3))	16	13.032	11.258	10.031	9.793	44.114
44	EFF9-44	pow(abs(l4), protectedNeg(sub(l4, 1)))	10	7.127	5.698	7.861	4.563	25.249
45	EFF9-45	abs(add(l2, sub(l2, protectedDiv(l4, l3))))	18	12.749	10.1635	13.4655	7.8005	44.1785
46	EFF9-46	mul(add(l3, sub(l1, abs(l1))), l1)	0	0	0	0	0	0
47	EFF9-47	pow(add(-1, l2), mul(add(l2, l3), l1))	12	8.7165	7.0755	8.4	5.626	29.818
48	EFF9-48	add(sub(l1, l1), mul(l4, l1))	9	6.677	5.493	5.892	4.951	23.013
49	EFF9-49	add(l4, mul(l3, l2))	13	9.719	8.0385	10.279	6.775	34.8115
50	EFF9-50	abs(add(l2, l1))	24	18.3785	15.544	19.6685	13.0155	66.6065
51	EFF9-51	add(mul(l3, l2), mul(add(l3, l4), protectedDiv(l1, l2)))	10	7.236	5.946	7.364	5.019	25.565
52	EFF9-52	add(protectedDiv(pow(l3, mul(protectedDiv(0, l4), sub(l1, l4))), l3), mul(l3, l2))	13	9.471	7.617	9.2285	5.209	31.5255
53	EFF9-53	pow(l4, protectedDiv(l3, l4))	10	7.127	5.698	7.861	4.563	25.249
54	EFF9-54	pow(l4, mul(l1, l4))	0	0	0	0	0	0
55	EFF9-55	pow(abs(l4), protectedNeg(0))	0	0	0	0	0	0
56	EFF9-56	add(sub(l4, l1), mul(l4, l1))	10	7.14	5.719	7.844	4.587	25.29
57	EFF9-57	sub(pow(-1, add(l1, l1)), abs(l4))	9	6.732	5.588	7.069	4.834	24.223

58	EFF9-58	add(add(sub(l4, sub(l1, add(l2, 1))), -1), mul(add(l3, l4), l1))	20	14.589	12.1595	15.536	10.4885	52.773
59	EFF9-59	pow(l4, protectedDiv(0, 0))	10	7.127	5.698	7.861	4.563	25.249
60	EFF9-60	add(sub(l1, l4), l1)	23	17.7045	14.977	18.951	12.6775	64.31
61	EFF9-61	pow(l4, sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), protectedDiv(l3, protectedDiv(0, l4))))	18	14.532	12.538	11.781	11.013	49.864
62	EFF9-62	add(sub(l1, l1), mul(l2, pow(l3, 0)))	9	6.732	5.588	7.069	4.834	24.223
63	EFF9-63	add(sub(l1, sub(l1, add(l2, 1))), l1)	24	18.3785	15.544	19.6685	13.0155	66.6065
64	EFF9-64	add(l3, l4)	20	15.0765	12.5845	16.122	10.129	53.912
65	EFF9-65	pow(protectedDiv(abs(l4), abs(l2)), add(0, 1))	10	7.127	5.698	7.861	4.563	25.249
66	EFF9-66	abs(sub(l1, protectedNeg(sub(add(l1, l3), protectedDiv(l4, l1)))))	25	18.8915	15.842	20.346	12.947	68.0265
67	EFF9-67	pow(l4, mul(l1, sub(1, l4)))	10	7.356	6.01	6.551	5.226	25.143
68	EFF9-68	pow(abs(-1), sub(add(l1, l3), protectedDiv(l4, l1)))	0	0	0	0	0	0
69	EFF9-69	add(sub(l4, l1), add(l1, 1))	10	7.127	5.698	7.861	4.563	25.249
70	EFF9-70	add(sub(l4, l1), l1)	10	7.127	5.698	7.861	4.563	25.249
71	EFF9-71	add(l3, mul(l3, l2))	9	6.965	5.9285	6.634	5.041	24.5685
72	EFF9-72	mul(protectedNeg(protectedNeg(l2)), protectedDiv(l3, l2))	17	12.1495	9.901	12.089	7.8605	42
73	EFF9-73	pow(abs(l1), mul(l3, l2))	13	9.509	7.694	10.073	5.939	33.215
74	EFF9-74	add(sub(l1, l4), mul(add(l1, sub(l1, add(l3, 0))), l1))	26	20.2845	17.327	21.321	14.6875	73.62
75	EFF9-75	mul(sub(l4, l1), protectedDiv(l3, l4))	16	12.2175	10.3505	11.013	8.64	42.221
76	EFF9-76	protectedDiv(l1, l3)	0	0	0	0	0	0
77	EFF9-77	mul(l4, l1)	9	6.677	5.493	5.892	4.951	23.013
78	EFF9-78	add(pow(sub(l3, sub(l1, l4)), sub(add(-1, -1), protectedDiv(l1, l4))), l2)	12	9.1555	7.7335	8.8015	6.5815	32.272
79	EFF9-79	add(abs(l4), mul(add(l3, l4), protectedDiv(l4, mul(l2, pow(l3, l2)))))	10	7.127	5.698	7.861	4.563	25.249
80	EFF9-80	add(abs(add(l3, protectedDiv(l4, l4))), l1)	18	14.532	12.538	11.781	11.013	49.864
81	EFF9-81	add(sub(l1, add(abs(l3), 1)), mul(l3, protectedDiv(l4, l4)))	13	9.471	7.617	9.2285	5.209	31.5255
82	EFF9-82	abs(add(l2, sub(l2, protectedDiv(l4, l4))))	18	14.532	12.538	11.781	11.013	49.864
83	EFF9-83	add(sub(l3, l2), protectedDiv(l3, -1))	10	7.127	5.698	7.861	4.563	25.249
84	EFF9-84	pow(l3, sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), protectedDiv(l3, protectedDiv(0, l4))))	16	13.032	11.258	10.031	9.793	44.114
85	EFF9-85	add(l4, l1)	21	15.8065	13.1745	16.772	10.499	56.252
86	EFF9-86	add(sub(l1, l1), mul(l3, pow(l3, l4)))	17	12.026	9.6105	12.2045	7.3655	41.2065

87	EFF9-87	$\text{pow}(\text{abs}(l1), \text{protectedDiv}(l1, l4))$	16	11.446	9.17	11.955	7.045	39.616
88	EFF9-88	$\text{add}(l4, \text{mul}(\text{sub}(l1, l1), \text{add}(l3, l4)))$	10	7.127	5.698	7.861	4.563	25.249
89	EFF9-89	$\text{add}(\text{sub}(l4, l1), \text{abs}(l4))$	21	15.8065	13.1645	16.912	10.559	56.442
90	EFF9-90	$\text{add}(\text{abs}(0), \text{mul}(\text{add}(l3, l4), \text{protectedDiv}(\text{pow}(-1, -1), l4)))$	11	7.863	6.328	8.661	5.101	27.953
91	EFF9-91	$\text{add}(\text{sub}(l1, \text{add}(\text{add}(\text{sub}(l4, 1), 1), 1)), \text{mul}(l3, \text{protectedDiv}(l4, l4)))$	18	14.532	12.538	11.781	11.013	49.864
92	EFF9-92	$\text{pow}(l4, \text{pow}(l4, l1))$	23	17.147	14.201	17.9885	11.5195	60.856
93	EFF9-93	$\text{abs}(\text{protectedDiv}(\text{mul}(\text{add}(l3, l2), \text{protectedDiv}(l4, l4)), l2))$	16	13.032	11.258	10.031	9.793	44.114
94	EFF9-94	$\text{mul}(l1, 1)$	0	0	0	0	0	0
95	EFF9-95	$\text{add}(l4, l2)$	0	0	0	0	0	0
96	EFF9-96	$\text{add}(\text{sub}(\text{add}(l4, l3), l4), \text{mul}(1, l2))$	27	20.4345	17.228	21.5035	13.588	72.754
97	EFF9-97	$\text{pow}(l1, \text{sub}(l1, \text{sub}(\text{abs}(\text{mul}(l3, l2)), \text{add}(\text{mul}(\text{add}(l3, \text{sub}(l1, l4))), l1), 1))))$	21	16.0455	13.454	16.2575	10.9675	56.7245
98	EFF9-98	$\text{pow}(\text{abs}(l4), \text{protectedDiv}(0, l3))$	12	10.03	9.0105	10.707	8.787	38.5345
99	EFF9-99	$\text{add}(l1, l2)$	24	18.3785	15.544	19.6685	13.0155	66.6065
100	EFF9-100	$\text{pow}(l2, \text{sub}(l1, \text{sub}(l1, \text{add}(l2, \text{sub}(l4, l2)))))$	9	6.732	5.588	7.069	4.834	24.223
101	EFF9-101	$\text{add}(l4, \text{mul}(l3, \text{protectedDiv}(l4, l4)))$	17	13.1535	11.0955	11.8815	9.2565	45.387
102	EFF9-102	$\text{add}(\text{sub}(l1, l4), \text{mul}(l1, l4))$	14	10.124	8.234	10.647	6.4085	35.4135
103	EFF9-103	$\text{abs}(\text{pow}(l3, l4))$	14	10.618	8.841	10.844	6.668	36.971
104	EFF9-104	$\text{mul}(\text{pow}(l3, l2), l1)$	14	11.009	9.481	10.062	7.405	37.957
105	EFF9-105	$\text{pow}(l2, \text{sub}(l1, \text{sub}(l1, \text{add}(l2, \text{sub}(l3, l2)))))$	9	6.742	5.588	7.079	4.834	24.243
106	EFF9-106	$\text{add}(l3, \text{mul}(\text{add}(l3, l4), l1))$	20	14.589	12.1595	15.536	10.4885	52.773
107	EFF9-107	$\text{add}(\text{sub}(l4, l3), \text{mul}(l4, l1))$	16	11.2925	8.978	12.1045	6.49	38.865
108	EFF9-108	$\text{protectedDiv}(l1, l2)$	14	10.23	8.3745	10.247	6.9675	35.819
109	EFF9-109	$\text{add}(\text{sub}(l1, l4), \text{mul}(l1, \text{abs}(\text{mul}(-1, l3))))$	20	14.6625	12.089	15.8175	10.315	52.884
110	EFF9-110	$\text{mul}(\text{protectedNeg}(\text{protectedNeg}(l2)), \text{protectedDiv}(-1, l4))$	10	7.127	5.698	7.861	4.563	25.249
111	EFF9-111	$\text{add}(l3, l1)$	0	0	0	0	0	0
112	EFF9-112	$\text{pow}(l2, \text{sub}(l1, \text{sub}(l4, \text{add}(l2, \text{sub}(l3, l2)))))$	9	6.732	5.588	7.069	4.834	24.223
113	EFF9-113	$\text{pow}(\text{abs}(\text{add}(l2, 1)), \text{protectedNeg}(\text{protectedNeg}(l2)))$	9	6.732	5.588	7.069	4.834	24.223
114	EFF9-114	$\text{add}(\text{sub}(l1, l3), \text{mul}(l2, l4))$	0	0	0	0	0	0
115	EFF9-115	$\text{add}(\text{sub}(l3, l2), \text{add}(\text{pow}(l1, l4), l3))$	9	7.0575	6.052	7.082	5.4965	25.688
116	EFF9-116	$\text{mul}(l1, l2)$	13	9.8535	8.2205	8.5755	7.0365	33.686
117	EFF9-117	$\text{add}(\text{sub}(l4, l1), \text{add}(l1, 1))$	10	7.127	5.698	7.861	4.563	25.249

118	EFF9-118	abs(protectedDiv(mul(add(l3, l4), l1), l2))	11	7.958	6.5255	8.038	5.408	27.9295
119	EFF9-119	add(l2, l2)	9	6.732	5.588	7.069	4.834	24.223
120	EFF9-120	pow(protectedDiv(l1, abs(l2)), add(0, l1))	7	5.1205	4.1375	5.298	3.5925	18.1485
121	EFF9-121	add(l3, mul(add(l3, l4), protectedDiv(add(l3, l4), l2)))	10	7.14	5.719	7.844	4.587	25.29
122	EFF9-122	add(sub(l1, add(add(sub(l4, 1), 1), 1)), mul(l3, protectedDiv(abs(l4), l4)))	18	14.532	12.538	11.781	11.013	49.864
123	EFF9-123	add(sub(l1, l3), mul(l2, pow(l3, l2)))	17	12.4255	10.123	13.371	7.9295	43.849
124	EFF9-124	pow(l3, sub(l3, add(l2, pow(0, l2))))	0	0	0	0	0	0
125	EFF9-125	pow(protectedDiv(l1, abs(l2)), add(0, 1))	14	10.23	8.3745	10.247	6.9675	35.819
126	EFF9-126	sub(pow(-1, add(l1, 1)), abs(l4))	11	8.356	7.012	8.094	6.1195	29.5815
127	EFF9-127	add(sub(l4, l1), l2)	0	0	0	0	0	0
128	EFF9-128	pow(abs(l3), protectedDiv(l3, l4))	15	11.6335	9.9295	10.8055	8.3025	40.671
129	EFF9-129	pow(protectedDiv(l3, l4), l3)	17	13.1835	11.2395	12.4655	9.5325	46.421
130	EFF9-130	add(sub(l1, l1), l4)	10	7.127	5.698	7.861	4.563	25.249
131	EFF9-131	abs(protectedDiv(mul(add(l3, l4), l2), l2))	17	12.1495	9.901	12.089	7.8605	42
132	EFF9-132	add(l4, mul(l3, l2))	13	9.719	8.0385	10.279	6.775	34.8115
133	EFF9-133	add(l3, l2)	27	20.4345	17.228	21.5035	13.588	72.754
134	EFF9-134	pow(l1, sub(l1, sub(abs(mul(l3, l2)), add(mul(add(l3, sub(l1, l4)), l1), 1))))	21	16.0455	13.454	16.2575	10.9675	56.7245
135	EFF9-135	add(sub(l4, l1), abs(l4))	21	15.8065	13.1645	16.912	10.559	56.442
136	EFF9-136	l4	10	7.127	5.698	7.861	4.563	25.249
137	EFF9-137	mul(l2, protectedDiv(l3, l4))	12	8.869	7.3185	9.309	6.025	31.5215
138	EFF9-138	mul(add(l3, sub(l3, l4)), l1)	27	21.677	19.168	22.7595	18.2655	81.87
139	EFF9-139	pow(protectedDiv(0, l2), abs(l4))	17	12.2405	10.0005	13.0075	7.572	42.8205
140	EFF9-140	add(l4, mul(l3, l4))	14	10.618	8.841	10.844	6.668	36.971
141	EFF9-141	l4	10	7.127	5.698	7.861	4.563	25.249
142	EFF9-142	mul(protectedNeg(protectedNeg(l2)), protectedDiv(l3, l4))	12	8.869	7.3185	9.309	6.025	31.5215
143	EFF9-143	abs(protectedDiv(pow(l1, l3), add(l2, l2)))	13	9.9755	8.3725	10.3235	7.034	35.7055
144	EFF9-144	add(l2, sub(l1, l3))	23	17.7045	14.977	18.951	12.6775	64.31
145	EFF9-145	add(sub(l1, add(sub(l4, 1), 1)), mul(add(l3, sub(l1, l4)), l1))	23	17.7045	14.977	18.951	12.6775	64.31
146	EFF9-146	add(abs(l2), l1)	24	18.3785	15.544	19.6685	13.0155	66.6065
147	EFF9-147	add(sub(l1, l3), l1)	0	0	0	0	0	0

148	EFF9-148	$\text{pow}(\text{abs}(l4), \text{protectedDiv}(l3, l3))$	10	7.127	5.698	7.861	4.563	25.249
149	EFF9-149	$\text{add}(\text{sub}(l1, l4), \text{mul}(\text{add}(l3, l3), l1))$	24	18.341	15.452	19.7205	12.9245	66.438
150	EFF9-150	$\text{pow}(\text{pow}(-1, \text{add}(l1, 1)), l1)$	0	0	0	0	0	0
151	EFF9-151	$\text{pow}(\text{abs}(\text{add}(l3, l3)), \text{sub}(\text{pow}(l3, \text{mul}(\text{protectedNeg}(\text{protectedDiv}(0, l4)), l3)), \text{protectedDiv}(l3, \text{protectedDiv}(0, l4))))$	16	13.032	11.258	10.031	9.793	44.114
152	EFF9-152	$\text{add}(0, \text{mul}(\text{abs}(\text{add}(l3, l3)), l1))$	0	0	0	0	0	0
153	EFF9-153	$\text{pow}(\text{add}(-1, l2), \text{sub}(l4, \text{sub}(l1, l3)))$	19	14.4	11.963	14.014	9.2825	49.6595
154	EFF9-154	$\text{add}(\text{sub}(l1, l4), \text{mul}(\text{add}(l3, l3), \text{add}(-1, l2)))$	17	12.5625	10.358	13.3915	8.3225	44.6345
155	EFF9-155	$\text{pow}(l4, \text{add}(l2, 1))$	10	7.127	5.698	7.861	4.563	25.249
156	EFF9-156	$\text{abs}(\text{protectedDiv}(\text{pow}(l1, l3), \text{add}(l4, l2)))$	0	0	0	0	0	0
157	EFF9-157	$\text{pow}(l3, \text{sub}(l1, \text{sub}(\text{sub}(l4, 1), \text{add}(l2, l3))))$	23	17.8245	15.252	18.066	12.82	63.9625
158	EFF9-158	$\text{add}(\text{sub}(l1, l1), \text{sub}(l1, l3))$	0	0	0	0	0	0
159	EFF9-159	$\text{add}(\text{sub}(l1, l1), \text{abs}(l3))$	0	0	0	0	0	0
160	EFF9-160	$\text{pow}(l4, l1)$	10	7.356	6.01	6.551	5.226	25.143

The values of FVe and fitness score of individuals in Generation 10 (on training set)

id	EFF	Experssion	FVe	fitness score				
				FMI	JC	PR	RR	SUM <sub>FS</sub>
1	EFF10-1	pow(abs(add(l3, l3)), sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), protectedDiv(l3, protectedDiv(0, l4))))	16	13.032	11.258	10.031	9.793	44.114
2	EFF10-2	abs(protectedDiv(pow(add(1, l1), l3), add(l2, l2)))	15	10.886	8.8155	11.67	6.929	38.3005
3	EFF10-3	add(l1, l3)	0	0	0	0	0	0
4	EFF10-4	pow(add(-1, l2), sub(l4, sub(l1, l3)))	19	14.4	11.963	14.014	9.2825	49.6595
5	EFF10-5	pow(l4, protectedNeg(sub(l2, protectedDiv(l4, l1))))	12	8.997	7.4705	9.18	6.621	32.2685
6	EFF10-6	add(sub(l1, l1), mul(l3, l2))	14	10.409	8.5685	10.869	7.415	37.2615
7	EFF10-7	mul(add(l3, l4), l1)	8	5.58	4.5455	5.5	3.678	19.3035
8	EFF10-8	pow(protectedDiv(l1, abs(l1)), add(0, l1))	0	0	0	0	0	0
9	EFF10-9	mul(l1, protectedDiv(abs(-1), l1))	0	0	0	0	0	0
10	EFF10-10	abs(protectedDiv(mul(add(l3, protectedDiv(0, l4)), protectedDiv(l4, protectedDiv(-1, l4))), l2))	16	13.032	11.258	10.031	9.793	44.114
11	EFF10-11	pow(l2, l2)	0	0	0	0	0	0
12	EFF10-12	abs(protectedDiv(-1, l4))	9	6.732	5.588	7.069	4.834	24.223
13	EFF10-13	add(sub(add(l4, l1), l4), mul(1, l2))	24	18.3785	15.544	19.6685	13.0155	66.6065
14	EFF10-14	pow(protectedNeg(l2), sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), protectedDiv(l3, protectedDiv(0, l4))))	16	13.032	11.258	10.031	9.793	44.114
15	EFF10-15	l4	10	7.127	5.698	7.861	4.563	25.249
16	EFF10-16	add(sub(l1, add(add(sub(l4, 1), mul(l4, l1)), 1)), mul(l3, protectedDiv(l4, l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
17	EFF10-17	add(sub(l1, l4), mul(add(l1, sub(l1, add(l3, 0))), l1))	26	20.2845	17.327	21.321	14.6875	73.62
18	EFF10-18	pow(abs(l1), protectedDiv(l1, l4))	16	11.446	9.17	11.955	7.045	39.616
19	EFF10-19	pow(l4, protectedDiv(l1, 0))	10	7.332	5.985	6.512	5.21	25.039
20	EFF10-20	add(protectedDiv(pow(l3, mul(protectedDiv(0, l4), sub(l1, l4))), sub(l1, l1)), mul(l3, l2))	18	14.542	12.538	11.791	11.023	49.894
21	EFF10-21	abs(protectedDiv(-1, l2))	10	7.127	5.698	7.861	4.563	25.249

22	EFF10-22	$\text{pow}(l3, \text{sub}(\text{pow}(l3, \text{mul}(\text{protectedNeg}(\text{protectedDiv}(0, \text{add}(0, l1))), l3)), \text{protectedDiv}(l3, \text{protectedDiv}(0, l4))))$	14	10.759	9.05	9.6375	7.68	37.1265
23	EFF10-23	$\text{pow}(l3, \text{sub}(\text{pow}(l3, \text{mul}(\text{protectedNeg}(\text{protectedDiv}(0, l4)), l3)), \text{protectedDiv}(l3, \text{protectedDiv}(0, l4))))$	16	13.032	11.258	10.031	9.793	44.114
24	EFF10-24	$\text{add}(\text{sub}(l1, l4), \text{mul}(l1, \text{abs}(\text{mul}(l4, l3))))$	12	9.093	7.62	8.6765	6.489	31.8785
25	EFF10-25	$\text{mul}(l2, \text{protectedDiv}(l3, l4))$	12	8.869	7.3185	9.309	6.025	31.5215
26	EFF10-26	$\text{add}(l1, \text{mul}(\text{protectedNeg}(\text{protectedDiv}(0, l4)), l3))$	13	9.471	7.617	9.2285	5.209	31.5255
27	EFF10-27	$\text{pow}(l3, \text{sub}(\text{pow}(l3, \text{mul}(\text{protectedNeg}(\text{protectedDiv}(0, l4)), l3)), \text{pow}(l3, 0)))$	18	14.542	12.538	11.791	11.023	49.894
28	EFF10-28	$\text{pow}(l4, \text{sub}(\text{pow}(l3, \text{mul}(\text{protectedNeg}(l3), l3)), \text{protectedDiv}(l3, \text{protectedDiv}(0, l4))))$	18	14.532	12.538	11.781	11.013	49.864
29	EFF10-29	$\text{add}(l4, l2)$	0	0	0	0	0	0
30	EFF10-30	$\text{sub}(\text{add}(\text{add}(l1, l1), l1), l2)$	22	16.425	13.6215	17.504	10.9875	58.538
31	EFF10-31	$\text{add}(l1, \text{add}(\text{pow}(l1, l4), l3))$	14	10.108	8.212	11.183	6.362	35.865
32	EFF10-32	$\text{add}(l3, \text{sub}(l1, l3))$	0	0	0	0	0	0
33	EFF10-33	$\text{add}(\text{sub}(l1, l4), \text{add}(l3, \text{sub}(\text{sub}(l1, \text{add}(l3, 0)), l4)))$	24	18.3785	15.544	19.6685	13.0155	66.6065
34	EFF10-34	$\text{add}(\text{sub}(l1, l1), \text{mul}(l3, \text{pow}(l3, l4)))$	17	12.026	9.6105	12.2045	7.3655	41.2065
35	EFF10-35	$\text{add}(\text{protectedDiv}(\text{protectedDiv}(-1, l2), l3), \text{mul}(l3, l2))$	14	10.409	8.5685	10.869	7.415	37.2615
36	EFF10-36	$\text{abs}(\text{pow}(\text{protectedDiv}(l3, l4), l4))$	14	10.618	8.841	10.844	6.668	36.971
37	EFF10-37	$\text{pow}(l4, \text{sub}(\text{pow}(l3, \text{mul}(\text{protectedNeg}(\text{protectedDiv}(0, l4)), l3)), \text{protectedDiv}(l3, \text{protectedDiv}(0, l4))))$	18	14.532	12.538	11.781	11.013	49.864
38	EFF10-38	$\text{pow}(\text{abs}(\text{mul}(-1, l3)), \text{protectedDiv}(l1, l4))$	18	12.8725	10.2625	13.7595	7.88	44.7745
39	EFF10-39	$\text{add}(l3, l4)$	20	15.0765	12.5845	16.122	10.129	53.912
40	EFF10-40	$\text{add}(\text{sub}(l3, \text{add}(\text{add}(\text{sub}(l4, 1), 1), 1)), \text{mul}(l3, \text{protectedDiv}(\text{abs}(l4), l4)))$	17	13.1535	11.0955	11.8815	9.2565	45.387
41	EFF10-41	$\text{abs}(-1)$	0	0	0	0	0	0
42	EFF10-42	$\text{mul}(\text{protectedNeg}(\text{protectedNeg}(l2)), \text{protectedDiv}(-1, \text{sub}(l2, \text{protectedDiv}(l4, l1))))$	10	7.332	5.985	6.512	5.21	25.039
43	EFF10-43	$\text{pow}(\text{abs}(l1), \text{mul}(l1, l2))$	14	10.379	8.5465	9.1145	7.4185	35.4585
44	EFF10-44	$\text{mul}(l2, \text{protectedDiv}(l3, -1))$	15	11.106	9.0275	11.656	7.1565	38.946
45	EFF10-45	$\text{pow}(l4, \text{protectedDiv}(0, 0))$	10	7.127	5.698	7.861	4.563	25.249
46	EFF10-46	$\text{sub}(\text{add}(1, l1), l2)$	21	15.8065	13.1745	16.772	10.499	56.252



47	EFF10-47	add(sub(l1, l4), l1)	23	17.7045	14.977	18.951	12.6775	64.31
48	EFF10-48	add(sub(l1, l4), mul(add(l3, l3), add(-1, l2)))	17	12.5625	10.358	13.3915	8.3225	44.6345
49	EFF10-49	l4	10	7.127	5.698	7.861	4.563	25.249
50	EFF10-50	abs(-1)	0	0	0	0	0	0
51	EFF10-51	pow(abs(add(l2, 1)), protectedNeg(protectedNeg(l2)))	9	6.732	5.588	7.069	4.834	24.223
52	EFF10-52	pow(abs(add(l2, sub(abs(mul(l3, l2)), add(mul(add(l3, sub(l1, l4)), l1), 1)))), protectedNeg(protectedNeg(l2)))	18	13.348	10.8855	10.9435	9.0515	44.2285
53	EFF10-53	add(sub(l1, add(l1, 1)), mul(l4, protectedDiv(l1, l4)))	13	9.471	7.617	9.2285	5.209	31.5255
54	EFF10-54	pow(add(l3, 0), add(0, l2))	13	9.719	8.0385	10.279	6.775	34.8115
55	EFF10-55	abs(sub(l4, l1))	20	15.2705	12.751	15.802	9.606	53.4295
56	EFF10-56	add(l3, l2)	27	20.4345	17.228	21.5035	13.588	72.754
57	EFF10-57	abs(l4)	10	7.127	5.698	7.861	4.563	25.249
58	EFF10-58	l3	0	0	0	0	0	0
59	EFF10-59	pow(l4, protectedNeg(protectedNeg(l2)))	10	7.127	5.698	7.861	4.563	25.249
60	EFF10-60	abs(l3)	0	0	0	0	0	0
61	EFF10-61	pow(l4, sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), protectedDiv(0, l4)))	18	14.532	12.538	11.781	11.013	49.864
62	EFF10-62	add(sub(l3, l2), add(pow(l1, l4), l3))	9	7.0575	6.052	7.082	5.4965	25.688
63	EFF10-63	add(sub(l4, l1), add(mul(add(l3, sub(l1, l4)), l1), 1))	22	16.616	13.8145	17.873	11.0685	59.372
64	EFF10-64	add(sub(l1, l4), mul(add(l1, sub(l1, add(l3, 0))), l1))	26	20.2845	17.327	21.321	14.6875	73.62
65	EFF10-65	add(l1, abs(l2))	24	18.3785	15.544	19.6685	13.0155	66.6065
66	EFF10-66	abs(protectedDiv(mul(l2, l2), l2))	17	12.2405	10.0005	13.0075	7.572	42.8205
67	EFF10-67	add(sub(l3, l2), protectedDiv(l3, l4))	14	10.7075	9.0395	9.9855	7.7245	37.457
68	EFF10-68	add(sub(l1, add(add(sub(l4, 1), 1), 1)), mul(l3, protectedDiv(abs(l4), l4)))	18	14.532	12.538	11.781	11.013	49.864
69	EFF10-69	add(sub(l1, add(add(sub(l4, 1), 1), 1)), mul(l3, protectedDiv(l4, l4)))	18	14.532	12.538	11.781	11.013	49.864
70	EFF10-70	abs(protectedDiv(-1, protectedDiv(l4, l4)))	18	14.532	12.538	11.781	11.013	49.864
71	EFF10-71	pow(l2, sub(pow(protectedNeg(l2), add(l2, l1)), sub(l1, add(l2, sub(l4, l2)))))	15	10.839	8.875	11.64	6.571	37.925
72	EFF10-72	l4	10	7.127	5.698	7.861	4.563	25.249
73	EFF10-73	pow(abs(l4), protectedDiv(l2, l3))	10	7.127	5.698	7.861	4.563	25.249

74	EFF10-74	abs(protectedDiv(mul(add(l3, l4), 1), l2))	10	7.14	5.719	7.844	4.587	25.29
75	EFF10-75	abs(pow(l3, l1))	0	0	0	0	0	0
76	EFF10-76	pow(abs(l4), protectedNeg(sub(l4, 1)))	10	7.127	5.698	7.861	4.563	25.249
77	EFF10-77	pow(l4, l3)	10	7.127	5.698	7.861	4.563	25.249
78	EFF10-78	pow(add(- 1, l2), sub(l4, sub(l1, l3)))	19	14.4	11.963	14.014	9.2825	49.6595
79	EFF10-79	add(sub(l1, l4), mul(add(l3, l3), l1))	24	18.341	15.452	19.7205	12.9245	66.438
80	EFF10-80	pow(l4, protectedDiv(l3, l4))	10	7.127	5.698	7.861	4.563	25.249
81	EFF10-81	add(l3, mul(add(l3, l4), l1))	20	14.589	12.1595	15.536	10.4885	52.773
82	EFF10-82	abs(add(l2, sub(l2, protectedDiv(l4, l4))))	18	14.532	12.538	11.781	11.013	49.864
83	EFF10-83	add(pow(l4, l1), add(- 1, l2))	32	24.5045	20.796	26.2535	17.8555	89.4095
84	EFF10-84	pow(l4, pow(l4, l1))	23	17.147	14.201	17.9885	11.5195	60.856
85	EFF10-85	pow(protectedDiv(l1, protectedDiv(l4, l1)), l1)	9	7.24	6.28	6.14	5.07	24.73
86	EFF10-86	add(mul(add(l3, l3), l1), l2)	22	15.997	13.052	16.831	10.741	56.621
87	EFF10-87	add(sub(l1, l2), mul(l1, abs(mul(- 1, l3))))	21	15.625	12.9415	16.654	10.4075	55.628
88	EFF10-88	protectedDiv(pow(l1, l3), mul(l3, l3))	0	0	0	0	0	0
89	EFF10-89	mul(protectedNeg(protectedNeg(l2)), mul(1, l2))	9	6.732	5.588	7.069	4.834	24.223
90	EFF10-90	add(sub(l1, l4), mul(mul(add(l3, l3), l1), add(- 1, l2)))	15	11.8225	10.143	10.1575	9.2025	41.3255
91	EFF10-91	add(l4, l2)	0	0	0	0	0	0
92	EFF10-92	pow(- 1, sub(l4, sub(l1, l3)))	9	6.514	5.278	7.217	4.21	23.219
93	EFF10-93	abs(sub(l1, protectedNeg(l2)))	24	18.3785	15.544	19.6685	13.0155	66.6065
94	EFF10-94	l2	9	6.732	5.588	7.069	4.834	24.223
95	EFF10-95	add(sub(l1, l4), mul(l4, l1))	14	10.124	8.234	10.647	6.4085	35.4135
96	EFF10-96	mul(l1, l2)	13	9.8535	8.2205	8.5755	7.0365	33.686
97	EFF10-97	add(sub(l1, l1), add(l1, 1))	0	0	0	0	0	0
98	EFF10-98	pow(protectedDiv(l1, abs(l2)), add(0, l2))	17	12.4425	10.113	12.584	6.9775	42.117
99	EFF10-99	protectedDiv(pow(l1, l3), l4)	16	11.336	9.183	12.276	7.211	40.006
100	EFF10-100	pow(abs(l4), protectedNeg(sub(l4, abs(l4))))	0	0	0	0	0	0
101	EFF10-101	add(protectedNeg(protectedNeg(l2)), add(pow(l1, l4), l3))	13	9.3195	7.43	8.047	6.4875	31.284
102	EFF10-102	abs(protectedDiv(mul(add(l3, l4), l2), l2))	17	12.1495	9.901	12.089	7.8605	42
103	EFF10-103	mul(protectedNeg(l2), protectedDiv(l3, l2))	7	4.7785	3.756	4.85	2.784	16.1685
104	EFF10-104	abs(protectedDiv(mul(add(l3, abs(l2)), l1), l2))	11	7.966	6.506	8.024	5.309	27.805
105	EFF10-105	add(abs(l3), mul(l4, protectedDiv(pow(- 1, - 1), l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387

106	EFF10-106	pow(l4, l1)	10	7.356	6.01	6.551	5.226	25.143
107	EFF10-107	add(0, add(-1, add(l2, sub(l2, protectedDiv(l4, l4))))))	18	14.532	12.538	11.781	11.013	49.864
108	EFF10-108	add(protectedDiv(l3, l4), mul(add(l1, sub(l1, add(l3, 0))), l1))	14	10.93	9.282	10.655	7.9115	38.7785
109	EFF10-109	add(sub(l1, l4), add(l3, sub(l1, l3)))	23	17.7045	14.977	18.951	12.6775	64.31
110	EFF10-110	add(l4, mul(l1, add(l3, l4)))	18	13.4785	11.1385	14.263	8.6785	47.5585
111	EFF10-111	add(l3, mul(abs(-1), l1))	0	0	0	0	0	0
112	EFF10-112	pow(abs(l1), mul(l3, l2))	13	9.509	7.694	10.073	5.939	33.215
113	EFF10-113	add(0, add(-1, l2))	9	6.732	5.588	7.069	4.834	24.223
114	EFF10-114	mul(l2, protectedDiv(add(l3, l4), l4))	12	8.869	7.3185	9.309	6.025	31.5215
115	EFF10-115	add(l4, add(l1, 1))	21	15.8065	13.1745	16.772	10.499	56.252
116	EFF10-116	pow(l2, sub(l1, sub(l1, add(l2, sub(l4, l2))))))	9	6.732	5.588	7.069	4.834	24.223
117	EFF10-117	add(abs(l2), l4)	0	0	0	0	0	0
118	EFF10-118	add(l4, mul(l3, pow(l3, l4)))	16	11.326	9.0505	11.3145	6.8955	38.5865
119	EFF10-119	pow(l4, protectedDiv(0, l4))	18	14.532	12.538	11.781	11.013	49.864
120	EFF10-120	add(l4, protectedDiv(0, l4))	18	14.532	12.538	11.781	11.013	49.864
121	EFF10-121	l4	10	7.127	5.698	7.861	4.563	25.249
122	EFF10-122	abs(sub(l1, protectedNeg(sub(l2, protectedDiv(l4, l1))))))	29	21.3605	17.6595	23.2065	14.076	76.3025
123	EFF10-123	protectedNeg(l3)	0	0	0	0	0	0
124	EFF10-124	add(sub(l1, l1), mul(add(mul(0, l2), protectedDiv(l2, l2)), pow(l3, 0)))	17	12.2405	10.0005	13.0075	7.572	42.8205
125	EFF10-125	pow(protectedDiv(l1, mul(l3, l2)), add(0, 1))	11	7.988	6.43	8.4475	5.1625	28.028
126	EFF10-126	add(sub(add(l4, l3), l4), mul(1, l2))	27	20.4345	17.228	21.5035	13.588	72.754
127	EFF10-127	add(sub(add(l4, l4), l4), mul(1, l2))	0	0	0	0	0	0
128	EFF10-128	add(sub(l3, l2), protectedDiv(l2, -1))	21	15.8065	13.1645	16.912	10.559	56.442
129	EFF10-129	add(sub(l1, l1), l1)	0	0	0	0	0	0
130	EFF10-130	add(abs(l2), add(l4, l3))	0	0	0	0	0	0
131	EFF10-131	add(l4, mul(protectedNeg(l1), add(l3, l4)))	16	12.0075	9.9475	12.771	7.67	42.396
132	EFF10-132	add(sub(l3, l2), protectedDiv(l3, -1))	10	7.127	5.698	7.861	4.563	25.249
133	EFF10-133	add(l2, sub(l1, l3))	23	17.7045	14.977	18.951	12.6775	64.31
134	EFF10-134	add(sub(l1, sub(l4, l3)), mul(l3, pow(l3, l4)))	17	12.026	9.6105	12.2045	7.3655	41.2065
135	EFF10-135	add(sub(l1, l4), mul(l1, abs(mul(-1, l3))))	20	14.6625	12.089	15.8175	10.315	52.884
136	EFF10-136	sub(pow(-1, add(l1, l3)), abs(l4))	9	6.732	5.588	7.069	4.834	24.223

137	EFF10-137	mul(l2, protectedDiv(l3, l4))	12	8.869	7.3185	9.309	6.025	31.5215
138	EFF10-138	abs(protectedDiv(mul(add(l3, protectedDiv(0, l4)), protectedDiv(l4, l4)), l2))	16	13.032	11.258	10.031	9.793	44.114
139	EFF10-139	mul(protectedNeg(protectedNeg(l2)), protectedDiv(l3, l2))	17	12.1495	9.901	12.089	7.8605	42
140	EFF10-140	add(sub(l1, l4), mul(l1, l1))	23	17.7045	14.977	18.951	12.6775	64.31
141	EFF10-141	pow(l4, mul(l3, l2))	10	7.127	5.698	7.861	4.563	25.249
142	EFF10-142	pow(l2, sub(l1, sub(l1, l4)))	9	6.732	5.588	7.069	4.834	24.223
143	EFF10-143	l2	9	6.732	5.588	7.069	4.834	24.223
144	EFF10-144	pow(l4, sub(l1, l4))	10	7.356	6.01	6.551	5.226	25.143
145	EFF10-145	add(0, add(1, l2))	9	6.732	5.588	7.069	4.834	24.223
146	EFF10-146	pow(l1, mul(l3, l2))	13	9.509	7.694	10.073	5.939	33.215
147	EFF10-147	add(l3, mul(1, l2))	27	20.4345	17.228	21.5035	13.588	72.754
148	EFF10-148	add(sub(l1, add(sub(l4, 1), 1)), mul(add(sub(l1, sub(l1, add(l2, sub(l4, l2))))), sub(l1, l4)), l1))	23	17.7045	14.977	18.951	12.6775	64.31
149	EFF10-149	abs(l2)	9	6.732	5.588	7.069	4.834	24.223
150	EFF10-150	mul(add(l4, l3), l2)	14	10.409	8.5685	10.869	7.415	37.2615
151	EFF10-151	abs(l1)	0	0	0	0	0	0
152	EFF10-152	mul(protectedNeg(protectedNeg(l4)), protectedDiv(l3, l2))	10	7.127	5.698	7.861	4.563	25.249
153	EFF10-153	add(sub(l4, l1), abs(l4))	21	15.8065	13.1645	16.912	10.559	56.442
154	EFF10-154	abs(protectedDiv(l3, l2))	10	7.14	5.719	7.844	4.587	25.29
155	EFF10-155	pow(mul(l3, l2), mul(l3, l2))	14	10.4195	8.615	10.713	7.232	36.9795
156	EFF10-156	l4	10	7.127	5.698	7.861	4.563	25.249
157	EFF10-157	pow(protectedDiv(l1, abs(l2)), add(protectedDiv(0, 0), l1))	13	9.38	7.5845	9.417	6.3675	32.749
158	EFF10-158	add(sub(sub(l1, l1), add(l1, 1)), mul(l3, protectedDiv(l1, l4)))	17	12.404	10.123	12.784	7.998	43.309
159	EFF10-159	add(sub(l1, add(l1, 1)), mul(l3, l3))	0	0	0	0	0	0
160	EFF10-160	pow(l2, sub(l1, sub(l1, add(l2, sub(l3, l2))))))	9	6.742	5.588	7.079	4.834	24.243

The values of FVe and fitness score of individuals in Generation 11 (on training set)

id	EFF	Experssion	FVe	fitness score				
				FMI	JC	PR	RR	SUMFs
1	EFF11-1	add(0, l1)	0	0	0	0	0	0
2	EFF11-2	pow(-1, sub(l4, sub(l1, l3)))	9	6.514	5.278	7.217	4.21	23.219
3	EFF11-3	add(sub(l1, l1), mul(l3, l4))	15	11.338	9.421	11.524	7.058	39.341
4	EFF11-4	pow(abs(l1), mul(l2, l2))	17	12.4425	10.113	12.584	6.9775	42.117
5	EFF11-5	add(0, add(-1, l2))	9	6.732	5.588	7.069	4.834	24.223
6	EFF11-6	pow(protectedDiv(l1, protectedDiv(l4, l1)), l1)	9	7.24	6.28	6.14	5.07	24.73
7	EFF11-7	add(l3, add(l3, sub(l1, l3)))	0	0	0	0	0	0
8	EFF11-8	add(sub(l1, l4), mul(add(l1, sub(l1, sub(l1, l4))), l1))	23	17.496	14.872	18.55	12.645	63.563
9	EFF11-9	add(sub(l1, l1), l4)	10	7.127	5.698	7.861	4.563	25.249
10	EFF11-10	pow(protectedNeg(l2), l4)	9	6.732	5.588	7.069	4.834	24.223
11	EFF11-11	add(protectedNeg(protectedNeg(l2)), add(pow(l1, l4), l3))	13	9.3195	7.43	8.047	6.4875	31.284
12	EFF11-12	add(l4, l1)	21	15.8065	13.1745	16.772	10.499	56.252
13	EFF11-13	add(sub(l1, l4), sub(l4, 1))	0	0	0	0	0	0
14	EFF11-14	add(sub(l1, add(add(sub(l4, 1), mul(l4, l1)), 1)), mul(l3, protectedDiv(l4, l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
15	EFF11-15	add(protectedDiv(protectedDiv(-1, l2), l3), sub(l4, 1))	14	10.409	8.5685	10.869	7.415	37.2615
16	EFF11-16	add(protectedDiv(pow(l3, mul(protectedDiv(0, l4), sub(l1, l4))), sub(l1, l1)), mul(l3, l2))	18	14.542	12.538	11.791	11.023	49.894
17	EFF11-17	add(sub(l1, l1), mul(protectedNeg(l1), add(l3, l4)))	33	25.8615	22.5015	26.871	20.8655	96.0995
18	EFF11-18	add(sub(l1, l4), add(mul(1, l2), sub(l1, l3)))	23	17.7045	14.977	18.951	12.6775	64.31
19	EFF11-19	add(l4, add(l1, l1))	22	16.425	13.6215	17.504	10.9875	58.538
20	EFF11-20	pow(l3, sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), pow(l3, 0)))	18	14.542	12.538	11.791	11.023	49.894
21	EFF11-21	add(sub(l3, l2), protectedDiv(l3, l4))	14	10.7075	9.0395	9.9855	7.7245	37.457
22	EFF11-22	pow(abs(l1), mul(l1, l4))	4	2.787	2.223	2.732	2.121	9.863
23	EFF11-23	add(l3, add(-1, add(l2, sub(l2, protectedDiv(l4, l4)))))	17	13.1535	11.0955	11.8815	9.2565	45.387
24	EFF11-24	protectedDiv(pow(l4, l3), l4)	18	14.5785	12.6685	11.857	11.1305	50.2345
25	EFF11-25	add(sub(l1, l4), add(l3, 1))	9	6.732	5.588	7.069	4.834	24.223
26	EFF11-26	abs(protectedDiv(l3, protectedDiv(0, l4)))	16	13.032	11.258	10.031	9.793	44.114

27	EFF11-27	add(sub(l3, l2), -1)	20	15.0765	12.5845	16.122	10.129	53.912
28	EFF11-28	add(0, add(-1, sub(l3, l2)))	20	15.0765	12.5845	16.122	10.129	53.912
29	EFF11-29	add(sub(l1, add(l3, l4)), mul(add(l1, sub(l1, add(l3, 0))), l1))	19	14.7025	12.431	15.5285	10.546	53.208
30	EFF11-30	pow(protectedDiv(l1, abs(l2)), protectedNeg(protectedNeg(l2)))	17	12.4425	10.113	12.584	6.9775	42.117
31	EFF11-31	add(sub(l1, add(l3, 1)), mul(l3, protectedDiv(abs(l4), l4)))	13	9.471	7.617	9.2285	5.209	31.5255
32	EFF11-32	add(0, mul(add(l1, sub(l1, add(l3, 0))), l1))	0	0	0	0	0	0
33	EFF11-33	add(protectedDiv(pow(l3, mul(protectedDiv(0, l4), sub(l1, l4))), sub(l1, l1)), mul(l1, l2))	18	14.542	12.538	11.791	11.023	49.894
34	EFF11-34	add(l2, abs(l2))	9	6.732	5.588	7.069	4.834	24.223
35	EFF11-35	add(l3, l4)	20	15.0765	12.5845	16.122	10.129	53.912
36	EFF11-36	add(pow(l4, -1), add(-1, l2))	9	6.732	5.588	7.069	4.834	24.223
37	EFF11-37	add(l2, mul(mul(add(l3, l3), l1), add(-1, l2)))	13	10.0245	8.498	9.8665	7.552	35.941
38	EFF11-38	add(sub(l1, l4), mul(add(l1, sub(l1, add(l3, 0))), l1))	26	20.2845	17.327	21.321	14.6875	73.62
39	EFF11-39	add(add(l4, l1), l4)	27	19.9335	16.372	20.79	12.154	69.2495
40	EFF11-40	add(sub(l1, add(add(sub(l4, protectedNeg(l1)), 1), 1)), mul(l3, protectedDiv(abs(l4), l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
41	EFF11-41	pow(l4, protectedNeg(protectedNeg(l2)))	10	7.127	5.698	7.861	4.563	25.249
42	EFF11-42	sub(pow(abs(l1), add(l1, l3)), abs(l4))	30	23.1755	19.8885	24.501	16.7715	84.3365
43	EFF11-43	sub(add(add(l1, l2), l1), l2)	0	0	0	0	0	0
44	EFF11-44	abs(l3)	0	0	0	0	0	0
45	EFF11-45	add(sub(l3, add(add(sub(l4, 1), 1), l4)), mul(l3, protectedDiv(abs(l4), l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
46	EFF11-46	pow(l3, sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), pow(l3, 0)))	18	14.542	12.538	11.791	11.023	49.894
47	EFF11-47	add(0, add(-1, add(l2, sub(l2, protectedDiv(l4, l4)))))	18	14.532	12.538	11.781	11.013	49.864
48	EFF11-48	abs(pow(protectedDiv(l3, l4), l2))	12	8.869	7.3185	9.309	6.025	31.5215
49	EFF11-49	add(sub(l3, add(add(l4, 1), 1)), mul(l3, protectedDiv(abs(l4), l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
50	EFF11-50	add(l4, abs(l2))	0	0	0	0	0	0
51	EFF11-51	mul(add(l4, l3), mul(l3, pow(l3, l4)))	17	12.384	10.0745	12.562	7.926	42.9465
52	EFF11-52	mul(protectedNeg(add(l2, l3)), protectedDiv(l3, -1))	22	16.9175	14.3865	18.1335	12.182	61.6195

53	EFF11-53	pow(l4, l1)	10	7.356	6.01	6.551	5.226	25.143
54	EFF11-54	add(l4, mul(protectedNeg(l1), l4))	16	11.518	9.3045	12.1725	7.2405	40.2355
55	EFF11-55	pow(protectedNeg(l2), sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), abs(mul(-1, l3))))	18	14.582	12.598	11.971	10.863	50.014
56	EFF11-56	add(sub(l1, l4), mul(l1, abs(add(add(l1, l1), l1))))	23	17.7045	14.977	18.951	12.6775	64.31
57	EFF11-57	add(l1, mul(1, l2))	24	18.3785	15.544	19.6685	13.0155	66.6065
58	EFF11-58	mul(protectedNeg(protectedNeg(l2)), protectedDiv(l3, l2))	17	12.1495	9.901	12.089	7.8605	42
59	EFF11-59	pow(l4, protectedNeg(protectedNeg(l4)))	0	0	0	0	0	0
60	EFF11-60	sub(add(add(l1, l1), l1), l2)	22	16.425	13.6215	17.504	10.9875	58.538
61	EFF11-61	add(sub(l1, l4), mul(add(pow(l3, l4), sub(l1, add(l3, 0))), l1))	11	8.764	7.669	7.832	6.3155	30.5805
62	EFF11-62	add(sub(l3, l2), protectedDiv(l3, -1))	10	7.127	5.698	7.861	4.563	25.249
63	EFF11-63	add(sub(l1, add(sub(l4, 1), 1)), mul(add(sub(l1, sub(l1, add(l2, sub(l4, l2)))), l2), l1))	23	17.7045	14.977	18.951	12.6775	64.31
64	EFF11-64	add(sub(l3, l2), add(-1, l2))	0	0	0	0	0	0
65	EFF11-65	pow(l4, sub(l3, l2))	10	7.127	5.698	7.861	4.563	25.249
66	EFF11-66	add(l2, sub(l1, l2))	0	0	0	0	0	0
67	EFF11-67	add(sub(l1, l4), mul(mul(sub(sub(l1, l1), add(l1, 1)), l1), add(-1, l2)))	13	10.021	8.5565	9.5345	7.456	35.568
68	EFF11-68	add(protectedDiv(protectedDiv(-1, l2), l3), mul(l3, l2))	14	10.409	8.5685	10.869	7.415	37.2615
69	EFF11-69	add(l3, mul(protectedNeg(l2), abs(-1)))	20	15.0765	12.5845	16.122	10.129	53.912
70	EFF11-70	add(l4, mul(protectedNeg(l1), abs(mul(l3, l2))))	10	7.13	5.709	7.814	4.567	25.22
71	EFF11-71	add(protectedDiv(protectedDiv(-1, l2), l3), mul(l1, l2))	18	13.486	11.2035	11.1945	9.3335	45.2175
72	EFF11-72	l3	0	0	0	0	0	0
73	EFF11-73	abs(0)	0	0	0	0	0	0
74	EFF11-74	pow(protectedNeg(l2), sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), protectedDiv(l3, protectedDiv(0, l4))))	16	13.032	11.258	10.031	9.793	44.114
75	EFF11-75	pow(pow(add(l4, l1), add(1, l4)), sub(l1, sub(l1, add(l2, sub(l3, l2)))))	12	9.091	7.491	9.189	5.64	31.411
76	EFF11-76	add(protectedDiv(0, l3), mul(l3, l2))	14	10.4295	8.615	10.831	7.3715	37.247
77	EFF11-77	pow(abs(l1), protectedDiv(sub(l1, l4), l4))	15	12.39	10.847	10.714	9.682	43.633

78	EFF11-78	add(l3, mul(1, l4))	20	15.0765	12.5845	16.122	10.129	53.912
79	EFF11-79	add(sub(l3, l2), protectedDiv(l3, sub(sub(l1, add(l3, 0)), l4)))	21	15.4325	12.619	16.7075	9.7245	54.4835
80	EFF11-80	add(l2, sub(l1, l4))	22	16.753	14.0385	18.1185	11.412	60.322
81	EFF11-81	abs(add(0, l1))	0	0	0	0	0	0
82	EFF11-82	abs(sub(l1, protectedNeg(sub(l2, protectedDiv(l1, l1)))))	31	23.8405	20.3625	24.584	17.459	86.246
83	EFF11-83	add(protectedDiv(l3, l4), mul(add(l2, sub(l1, add(l3, 0))), l1))	10	7.777	6.6905	7.424	5.4335	27.325
84	EFF11-84	abs(protectedDiv(mul(l2, l2), l2))	17	12.2405	10.0005	13.0075	7.572	42.8205
85	EFF11-85	add(l4, add(l1, 1))	21	15.8065	13.1745	16.772	10.499	56.252
86	EFF11-86	pow(l3, sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), protectedDiv(l4, l4)))	18	14.542	12.538	11.791	11.023	49.894
87	EFF11-87	pow(abs(add(l2, sub(abs(l1), add(mul(add(l3, sub(l1, l4)), l1), 1))), protectedNeg(protectedNeg(l2)))	17	12.4145	10.0595	12.3115	6.9165	41.702
88	EFF11-88	add(sub(l3, add(add(sub(l4, 1), 1), 1)), mul(l1, protectedDiv(abs(l4), l4)))	18	14.532	12.538	11.781	11.013	49.864
89	EFF11-89	add(l4, add(l1, 1))	21	15.8065	13.1745	16.772	10.499	56.252
90	EFF11-90	pow(l2, l1)	16	12.555	10.7135	11.269	9.2565	43.794
91	EFF11-91	add(l3, mul(l3, l1))	0	0	0	0	0	0
92	EFF11-92	pow(l2, sub(l1, sub(l4, add(l2, sub(l4, l2)))))	16	12.555	10.7135	11.269	9.2565	43.794
93	EFF11-93	add(pow(l4, l1), protectedNeg(l2))	10	7.127	5.698	7.861	4.563	25.249
94	EFF11-94	pow(l4, protectedNeg(sub(l2, protectedDiv(l4, l1))))	12	8.997	7.4705	9.18	6.621	32.2685
95	EFF11-95	sub(l4, abs(l4))	0	0	0	0	0	0
96	EFF11-96	mul(add(add(l1, l1), l4), l1)	17	13.105	11.3855	12.12	10.052	46.6625
97	EFF11-97	pow(protectedNeg(l2), sub(pow(l1, l4), protectedDiv(l3, protectedDiv(0, l4))))	16	13.032	11.258	10.031	9.793	44.114
98	EFF11-98	add(0, l2)	9	6.732	5.588	7.069	4.834	24.223
99	EFF11-99	pow(l2, sub(l1, sub(l1, add(l2, sub(l3, protectedDiv(0, l4)))))	9	6.742	5.588	7.079	4.834	24.243
100	EFF11-100	add(l3, l4)	20	15.0765	12.5845	16.122	10.129	53.912
101	EFF11-101	abs(sub(l4, l1))	20	15.2705	12.751	15.802	9.606	53.4295
102	EFF11-102	pow(l4, mul(l3, l2))	10	7.127	5.698	7.861	4.563	25.249
103	EFF11-103	add(l1, add(pow(l1, l4), l3))	14	10.108	8.212	11.183	6.362	35.865
104	EFF11-104	pow(l1, mul(l3, l2))	13	9.509	7.694	10.073	5.939	33.215



105	EFF11-105	abs(l1)	0	0	0	0	0	0
106	EFF11-106	add(pow(l4, l1), add(-1, l2))	32	24.5045	20.796	26.2535	17.8555	89.4095
107	EFF11-107	add(sub(l1, add(l1, 1)), mul(l4, protectedDiv(l1, l4)))	13	9.471	7.617	9.2285	5.209	31.5255
108	EFF11-108	add(sub(l1, l4), mul(l1, l1))	23	17.7045	14.977	18.951	12.6775	64.31
109	EFF11-109	mul(l2, protectedDiv(l3, l4))	12	8.869	7.3185	9.309	6.025	31.5215
110	EFF11-110	add(abs(l3), l4)	20	15.0765	12.5845	16.122	10.129	53.912
111	EFF11-111	add(sub(l1, add(add(sub(l4, 1), l4), 1)), mul(l3, protectedDiv(abs(l4), l4)))	18	14.532	12.538	11.781	11.013	49.864
112	EFF11-112	pow(protectedNeg(l2), sub(l4, protectedDiv(l3, protectedDiv(0, l4))))	16	13.032	11.258	10.031	9.793	44.114
113	EFF11-113	add(0, add(-1, add(l2, mul(protectedNeg(protectedDiv(0, l4)), l3))))	18	14.532	12.538	11.781	11.013	49.864
114	EFF11-114	pow(l2, sub(l1, sub(l1, l4)))	9	6.732	5.588	7.069	4.834	24.223
115	EFF11-115	add(l3, mul(add(l3, protectedDiv(l3, -1)), l1))	0	0	0	0	0	0
116	EFF11-116	pow(mul(mul(l1, l4), abs(l3)), protectedDiv(l1, l4))	14	10.501	8.808	10.397	7.7035	37.4095
117	EFF11-117	pow(abs(l2), protectedNeg(sub(l4, 1)))	0	0	0	0	0	0
118	EFF11-118	mul(protectedNeg(l2), l2)	10	7.127	5.698	7.861	4.563	25.249
119	EFF11-119	add(protectedDiv(pow(l3, mul(protectedDiv(0, l4), 0)), sub(l1, l1)), mul(l3, l2))	18	14.542	12.538	11.791	11.023	49.894
120	EFF11-120	add(sub(l1, l4), l1)	23	17.7045	14.977	18.951	12.6775	64.31
121	EFF11-121	add(l3, abs(l1))	0	0	0	0	0	0
122	EFF11-122	add(sub(l1, add(sub(l4, 1), 1)), mul(add(sub(l1, sub(l1, add(l2, sub(l4, l2))))), sub(l1, l4), l1))	23	17.7045	14.977	18.951	12.6775	64.31
123	EFF11-123	pow(protectedNeg(l2), sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), protectedDiv(l3, add(-1, l2))))	18	14.532	12.538	11.781	11.013	49.864
124	EFF11-124	mul(mul(protectedDiv(0, l4), sub(l1, l4)), l2)	18	14.532	12.538	11.781	11.013	49.864
125	EFF11-125	pow(abs(add(l2, sub(abs(mul(l3, l2)), add(mul(add(l3, sub(l4, l4)), l1), 1)))), protectedNeg(protectedNeg(l2)))	17	13.183	11.1555	12.086	9.6165	46.041
126	EFF11-126	add(protectedDiv(protectedDiv(-1, l2), l3), mul(l3, l2))	14	10.409	8.5685	10.869	7.415	37.2615
127	EFF11-127	pow(protectedDiv(l1, protectedDiv(l2, l1)), l1)	7	5.0405	4.0175	5.158	3.4525	17.6685
128	EFF11-128	add(-1, mul(l3, pow(l3, l4)))	17	12.026	9.6105	12.2045	7.3655	41.2065

129	EFF11-129	add(l1, add(l1, 1))	0	0	0	0	0	0
130	EFF11-130	add(sub(abs(protectedDiv(l2, l2)), l4), mul(l1, abs(mul(-1, l3))))	16	11.8565	9.884	11.918	8.165	41.8235
131	EFF11-131	pow(abs(l1), sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), protectedDiv(l3, protectedDiv(0, l4))))	14	11.132	9.5385	9.017	8.2845	37.972
132	EFF11-132	pow(abs(l1), sub(l4, l1))	22	16.728	13.994	16.9475	11.0805	58.75
133	EFF11-133	add(sub(l1, l4), mul(add(l3, 0), add(-1, l2)))	15	11.052	8.9885	11.8025	7.127	38.97
134	EFF11-134	add(0, 1)	0	0	0	0	0	0
135	EFF11-135	add(sub(l1, l4), mul(add(l1, sub(l1, l1)), l1))	23	17.7045	14.977	18.951	12.6775	64.31
136	EFF11-136	add(l3, 1)	0	0	0	0	0	0
137	EFF11-137	add(sub(l1, l4), add(l3, sub(sub(l1, add(l3, 0)), mul(l3, protectedDiv(l1, l4))))	23	16.7425	13.7735	15.0425	11.075	56.6335
138	EFF11-138	pow(-1, sub(l4, sub(pow(l1, l4), l3)))	7	5.475	4.6525	4.251	3.7495	18.128
139	EFF11-139	add(sub(l1, l4), mul(mul(add(l3, l3), l1), add(-1, sub(l1, l1))))	23	17.7045	14.977	18.951	12.6775	64.31
140	EFF11-140	abs(protectedDiv(add(l1, l3), add(l2, l2)))	10	7.127	5.698	7.861	4.563	25.249
141	EFF11-141	add(sub(l1, 0), mul(l3, pow(l3, l4)))	14	10.618	8.841	10.854	6.668	36.981
142	EFF11-142	add(sub(l3, l2), l4)	21	15.8065	13.1645	16.912	10.559	56.442
143	EFF11-143	add(sub(1, sub(l4, l3)), mul(l3, pow(l3, l4)))	16	11.404	9.1245	11.422	7.056	39.0065
144	EFF11-144	pow(l1, add(0, l2))	17	12.4425	10.113	12.584	6.9775	42.117
145	EFF11-145	add(protectedDiv(l3, l4), mul(add(protectedDiv(l3, l4), sub(l1, add(l3, 0))), l1))	15	10.6255	8.4465	11.2675	6.5215	36.861
146	EFF11-146	add(0, add(1, protectedNeg(l2)))	10	7.127	5.698	7.861	4.563	25.249
147	EFF11-147	protectedDiv(pow(l1, l3), protectedDiv(l3, l2))	15	11.4895	9.647	10.5125	8.5495	40.1985
148	EFF11-148	add(mul(add(l3, l3), add(-1, l2)), protectedDiv(l3, l4))	16	11.2645	8.9415	11.9435	6.8095	38.959
149	EFF11-149	add(sub(l1, l4), mul(add(l3, l3), add(-1, l2)))	17	12.5625	10.358	13.3915	8.3225	44.6345
150	EFF11-150	pow(abs(add(l2, 1)), l4)	0	0	0	0	0	0
151	EFF11-151	pow(abs(add(l2, sub(l1, add(mul(add(l3, sub(l1, l4)), l1), 1))), protectedNeg(protectedNeg(l2)))	17	12.4145	10.0595	12.3115	6.9165	41.702
152	EFF11-152	add(abs(l3), mul(l4, protectedDiv(pow(-1, -1), l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
153	EFF11-153	pow(l2, sub(l1, sub(l1, add(l2, sub(l3, l2))))	9	6.742	5.588	7.079	4.834	24.243
154	EFF11-154	l2	9	6.732	5.588	7.069	4.834	24.223

155	EFF11-155	abs(protectedDiv(pow(add(1, add(l3, l4)), l3), add(l2, l2)))	14	10.57	8.769	11.424	6.967	37.73
156	EFF11-156	pow(abs(add(l2, 1)), protectedDiv(l1, l4))	12	8.997	7.4705	9.18	6.621	32.2685
157	EFF11-157	mul(add(sub(l4, 1), 1), l2)	0	0	0	0	0	0
158	EFF11-158	pow(protectedNeg(l2), sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), protectedDiv(l3, protectedDiv(abs(l2), l4))))	17	13.812	11.918	11.021	10.413	47.164
159	EFF11-159	add(0, l3)	0	0	0	0	0	0
160	EFF11-160	add(sub(l4, l1), abs(l4))	21	15.8065	13.1645	16.912	10.559	56.442

The values of FVe and fitness score of individuals in Generation 12 (on training set)

id	EFF	Experssion	FVe	fitness score				
				FMI	JC	PR	RR	SUMFs
1	EFF12-1	add(l1, mul(l3, l4))	15	11.106	9.0275	11.656	7.1565	38.946
2	EFF12-2	add(sub(l3, add(add(sub(l4, 1), 1), 1)), mul(l1, l3))	20	14.988	12.4315	16.085	10.098	53.6025
3	EFF12-3	mul(l2, protectedDiv(l3, l4))	12	8.869	7.3185	9.309	6.025	31.5215
4	EFF12-4	pow(l4, protectedNeg(sub(l2, protectedDiv(l4, add(l4, l1)))))	12	8.997	7.4705	9.18	6.621	32.2685
5	EFF12-5	add(l3, l2)	27	20.4345	17.228	21.5035	13.588	72.754
6	EFF12-6	add(protectedDiv(pow(l3, mul(protectedDiv(0, l4), sub(l1, l4))), sub(l1, l1)), mul(l1, l2))	18	14.542	12.538	11.791	11.023	49.894
7	EFF12-7	pow(protectedNeg(l2), sub(l4, protectedDiv(l3, l1)))	13	9.722	8.074	10.3215	6.35	34.4675
8	EFF12-8	add(l2, add(l1, l1))	23	17.7045	14.977	18.951	12.6775	64.31
9	EFF12-9	pow(protectedNeg(l2), sub(l4, protectedDiv(l3, protectedDiv(mul(mul(sub(sub(l1, l1), add(l1, 1)), l1), add(-1, l2)), l4))))	17	13.416	11.479	11.732	9.858	46.485
10	EFF12-10	mul(l2, pow(-1, -1))	10	7.127	5.698	7.861	4.563	25.249
11	EFF12-11	add(protectedDiv(pow(l3, mul(protectedDiv(0, l4), sub(l1, l4))), sub(l1, l1)), mul(l3, l2))	18	14.542	12.538	11.791	11.023	49.894
12	EFF12-12	pow(l3, protectedDiv(sub(l1, l4), l4))	17	12.1795	9.7575	13.0715	7.4685	42.477
13	EFF12-13	add(sub(l3, add(add(sub(l4, 1), 1), 1)), mul(l1, protectedDiv(abs(mul(l3, l4)), l4)))	12	8.846	7.2165	8.5835	5.379	30.025
14	EFF12-14	add(protectedNeg(l2), l1)	21	15.8065	13.1745	16.772	10.499	56.252
15	EFF12-15	pow(mul(mul(l1, l4), l1), protectedDiv(l1, l4))	15	11.504	9.7155	10.021	8.328	39.5685
16	EFF12-16	pow(mul(mul(l1, l4), abs(l3)), protectedDiv(l1, l4))	14	10.501	8.808	10.397	7.7035	37.4095
17	EFF12-17	add(l1, abs(l4))	21	15.8065	13.1745	16.772	10.499	56.252
18	EFF12-18	pow(abs(add(l2, sub(l1, add(mul(add(l3, sub(l1, l4)), l1), 1))), protectedNeg(protectedNeg(l2)))	17	12.4145	10.0595	12.3115	6.9165	41.702
19	EFF12-19	add(l2, protectedNeg(l2))	0	0	0	0	0	0
20	EFF12-20	add(sub(l3, l2), l4)	21	15.8065	13.1645	16.912	10.559	56.442
21	EFF12-21	add(sub(l1, pow(l4, l1)), mul(protectedNeg(l1), add(l3, l4)))	28	21.9065	18.8135	23.3275	17.201	81.2485

22	EFF12-22	add(sub(l3, add(add(l4, 1), 1)), mul(l3, protectedDiv(protectedDiv(l3, protectedDiv(abs(l2), l4)), l4)))	16	13.032	11.258	10.031	9.793	44.114
23	EFF12-23	pow(-1, sub(l4, sub(l1, l3)))	9	6.514	5.278	7.217	4.21	23.219
24	EFF12-24	add(sub(l3, l4), mul(l3, protectedDiv(abs(l4), l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
25	EFF12-25	pow(l1, protectedDiv(l1, l4))	16	11.446	9.17	11.955	7.045	39.616
26	EFF12-26	abs(protectedDiv(mul(l2, protectedDiv(l4, l1)), l2))	19	14.405	12.089	13.6505	10.312	50.4565
27	EFF12-27	pow(abs(add(l2, sub(abs(l1), add(mul(add(l3, sub(l1, l4)), l1), sub(l1, l4))))) , protectedNeg(protectedNeg(l2)))	13	9.8535	8.2205	8.5755	7.0365	33.686
28	EFF12-28	pow(l4, l4)	0	0	0	0	0	0
29	EFF12-29	add(sub(l1, l1), sub(l1, l1))	0	0	0	0	0	0
30	EFF12-30	add(l4, l1)	21	15.8065	13.1745	16.772	10.499	56.252
31	EFF12-31	add(sub(l1, l4), mul(add(l3, 0), add(-1, 0)))	23	17.7045	14.977	18.951	12.6775	64.31
32	EFF12-32	add(protectedDiv(pow(l3, mul(protectedDiv(0, l4), 0)), sub(l1, l1)), mul(l3, l2))	18	14.542	12.538	11.791	11.023	49.894
33	EFF12-33	pow(protectedNeg(l2), sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), protectedDiv(l4, l4))), protectedDiv(l3, protectedDiv(0, l4))))	16	13.032	11.258	10.031	9.793	44.114
34	EFF12-34	add(sub(l1, add(sub(l4, 1), 1)), mul(add(sub(l1, sub(l1, add(l2, sub(l4, l2))))) , l2), l1))	23	17.7045	14.977	18.951	12.6775	64.31
35	EFF12-35	sub(pow(abs(l2), add(l1, l3)), abs(l4))	9	6.732	5.588	7.069	4.834	24.223
36	EFF12-36	add(add(0, l1), l4)	21	15.8065	13.1745	16.772	10.499	56.252
37	EFF12-37	add(0, add(-1, add(l2, sub(l2, protectedDiv(l4, l4)))))	18	14.532	12.538	11.781	11.013	49.864
38	EFF12-38	pow(l4, protectedNeg(sub(l2, protectedDiv(l4, l1))))	12	8.997	7.4705	9.18	6.621	32.2685
39	EFF12-39	add(0, -1)	0	0	0	0	0	0
40	EFF12-40	pow(l2, l1)	16	12.555	10.7135	11.269	9.2565	43.794
41	EFF12-41	mul(add(l4, l3), mul(l3, abs(l3)))	22	16.425	13.6215	17.504	10.9875	58.538
42	EFF12-42	pow(l3, sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), pow(l3, 0)))	18	14.542	12.538	11.791	11.023	49.894
43	EFF12-43	pow(l2, sub(l1, sub(l1, add(l2, sub(l3, protectedDiv(0, l4)))))	9	6.742	5.588	7.079	4.834	24.243
44	EFF12-44	add(protectedDiv(pow(l3, mul(protectedDiv(0, l4), sub(l1, l4))), sub(l1, l4)), mul(l3, l2))	10	7.397	6.093	7.295	4.828	25.613

45	EFF12-45	mul(add(add(l1, l1), l4), l1)	17	13.105	11.3855	12.12	10.052	46.6625
46	EFF12-46	add(-1, mul(l3, pow(l3, 1)))	0	0	0	0	0	0
47	EFF12-47	add(abs(l3), mul(l4, protectedDiv(pow(-1, -1), l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
48	EFF12-48	add(abs(l3), mul(l4, protectedDiv(pow(-1, -1), l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
49	EFF12-49	mul(protectedDiv(l1, l1), protectedDiv(l3, l4))	16	12.0245	9.942	11.7675	8.5775	42.3115
50	EFF12-50	abs(protectedDiv(add(sub(l1, l4), l3), add(l2, l2)))	10	7.127	5.698	7.861	4.563	25.249
51	EFF12-51	add(l3, add(-1, add(l2, sub(l2, protectedDiv(l4, l4)))))	17	13.1535	11.0955	11.8815	9.2565	45.387
52	EFF12-52	pow(abs(l1), mul(l3, l2))	13	9.509	7.694	10.073	5.939	33.215
53	EFF12-53	pow(l3, sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), abs(mul(-1, l3))))	14	10.193	8.205	9.7395	5.752	33.8895
54	EFF12-54	add(0, add(l1, sub(l3, l2)))	10	7.127	5.698	7.861	4.563	25.249
55	EFF12-55	abs(sub(l4, l1))	20	15.2705	12.751	15.802	9.606	53.4295
56	EFF12-56	add(sub(l1, l4), l1)	23	17.7045	14.977	18.951	12.6775	64.31
57	EFF12-57	add(pow(l4, l1), protectedNeg(l2))	10	7.127	5.698	7.861	4.563	25.249
58	EFF12-58	add(l2, -1)	9	6.732	5.588	7.069	4.834	24.223
59	EFF12-59	add(sub(l3, add(add(sub(l4, 0), 1), 1)), mul(l1, protectedDiv(abs(l4), l4)))	18	14.532	12.538	11.781	11.013	49.864
60	EFF12-60	add(sub(l3, add(add(sub(l4, 1), l4), l4)), mul(l3, protectedDiv(abs(l4), l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
61	EFF12-61	add(sub(l1, l1), mul(l3, l4))	15	11.338	9.421	11.524	7.058	39.341
62	EFF12-62	abs(protectedDiv(add(l1, l3), add(l2, l2)))	10	7.127	5.698	7.861	4.563	25.249
63	EFF12-63	pow(l4, mul(l3, l2))	10	7.127	5.698	7.861	4.563	25.249
64	EFF12-64	add(sub(1, sub(l4, l3)), mul(l3, l4))	17	12.714	10.5645	12.792	8.416	44.4865
65	EFF12-65	add(sub(l3, add(add(add(l1, l1), 1), 1)), mul(l3, protectedDiv(abs(l4), l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
66	EFF12-66	pow(abs(l1), sub(l4, l1))	22	16.728	13.994	16.9475	11.0805	58.75
67	EFF12-67	add(add(l4, l1), l4)	27	19.9335	16.372	20.79	12.154	69.2495
68	EFF12-68	abs(protectedDiv(mul(l2, l2), l1))	7	5.14	4.18	5.49	3.71	18.52
69	EFF12-69	add(abs(l3), 0)	0	0	0	0	0	0
70	EFF12-70	abs(0)	0	0	0	0	0	0
71	EFF12-71	add(l4, mul(protectedNeg(protectedDiv(mul(l3, l4), mul(l3, l4))), abs(mul(l3, l2))))	16	13.032	11.258	10.031	9.793	44.114

72	EFF12-72	add(sub(l3, l2), mul(l3, protectedDiv(abs(l4), l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
73	EFF12-73	add(sub(l1, l4), mul(add(l4, 0), add(-1, l2)))	22	16.753	14.0385	18.1185	11.412	60.322
74	EFF12-74	add(-1, protectedDiv(l4, l4))	18	14.532	12.538	11.781	11.013	49.864
75	EFF12-75	add(sub(l1, l4), mul(mul(sub(sub(l1, l1), add(l3, 1)), l1), add(-1, l2)))	9	6.733	5.5995	6.4965	4.839	23.668
76	EFF12-76	add(sub(l1, l4), l4)	0	0	0	0	0	0
77	EFF12-77	pow(abs(l1), mul(l2, l2))	17	12.4425	10.113	12.584	6.9775	42.117
78	EFF12-78	add(sub(l1, add(add(sub(l4, 1), l4), 1)), 0)	22	16.753	14.0385	18.1185	11.412	60.322
79	EFF12-79	add(sub(l1, l4), abs(l1))	23	17.7045	14.977	18.951	12.6775	64.31
80	EFF12-80	add(l4, l2)	0	0	0	0	0	0
81	EFF12-81	mul(protectedNeg(add(l2, l3)), l4)	17	12.0745	9.6415	12.7635	7.4395	41.919
82	EFF12-82	pow(abs(add(l2, sub(abs(l1), add(mul(add(l3, sub(l1, l4)), l1), 1))), protectedNeg(protectedNeg(l2)))	17	12.4145	10.0595	12.3115	6.9165	41.702
83	EFF12-83	add(sub(l1, l4), l2)	22	16.753	14.0385	18.1185	11.412	60.322
84	EFF12-84	pow(abs(l1), protectedDiv(sub(l1, l4), l4))	15	12.39	10.847	10.714	9.682	43.633
85	EFF12-85	add(l4, l1)	21	15.8065	13.1745	16.772	10.499	56.252
86	EFF12-86	pow(abs(l1), sub(l4, l2))	14	10.506	8.69	11.391	7.05	37.637
87	EFF12-87	pow(abs(add(l2, sub(abs(l1), add(mul(add(mul(protectedNeg(l2), abs(-1)), sub(l1, l4)), l1), 1))), protectedNeg(protectedNeg(l2)))	12	8.901	7.253	8.9795	5.1565	30.29
88	EFF12-88	add(protectedDiv(pow(l3, mul(protectedDiv(0, protectedNeg(l2)), 0)), sub(l1, l1)), mul(l3, l2))	0	0	0	0	0	0
89	EFF12-89	add(protectedDiv(protectedDiv(-1, l2), protectedDiv(abs(l4), l4)), mul(l3, l2))	18	14.532	12.538	11.781	11.013	49.864
90	EFF12-90	sub(pow(abs(l1), add(l1, l3)), l4)	30	23.1755	19.8885	24.501	16.7715	84.3365
91	EFF12-91	add(sub(l1, add(add(sub(l4, 1), mul(l4, l1)), 1)), mul(l3, protectedDiv(l4, l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
92	EFF12-92	add(0, add(l1, l1))	0	0	0	0	0	0
93	EFF12-93	add(sub(l1, l4), l1)	23	17.7045	14.977	18.951	12.6775	64.31
94	EFF12-94	add(sub(l1, l4), 0)	24	18.3785	15.544	19.6685	13.0155	66.6065
95	EFF12-95	add(sub(l3, l1), mul(l1, protectedDiv(abs(l4), l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
96	EFF12-96	pow(-1, l1)	0	0	0	0	0	0

97	EFF12-97	pow(protectedDiv(l1, abs(l2)), protectedNeg(sub(abs(mul(l3, l2)), add(mul(add(l3, sub(l4, l4)), l1), 1))))	17	13.0655	11.1355	12.957	8.9635	46.1215
98	EFF12-98	pow(l3, sub(l4, l1))	20	15.2575	12.7775	16.381	10.1	54.516
99	EFF12-99	pow(l2, sub(l1, sub(l1, add(sub(l4, l1), sub(l3, l2)))))	12	8.754	7.121	8.957	5.58	30.412
100	EFF12-100	add(protectedNeg(l3), l4)	21	15.8065	13.1745	16.772	10.499	56.252
101	EFF12-101	add(l4, mul(protectedNeg(l1), add(l3, l3)))	23	17.26	14.3805	17.911	11.5505	61.102
102	EFF12-102	add(sub(l1, l4), mul(l4, add(- 1, l2)))	22	16.753	14.0385	18.1185	11.412	60.322
103	EFF12-103	add(protectedDiv(l3, l4), mul(add(protectedDiv(l3, l4), sub(l1, add(l3, 0))), l1))	15	10.6255	8.4465	11.2675	6.5215	36.861
104	EFF12-104	add(add(protectedDiv(abs(l4), l4), l1), l4)	13	9.471	7.617	9.2285	5.209	31.5255
105	EFF12-105	pow(l2, sub(l1, sub(l1, add(l2, sub(l3, l2)))))	9	6.742	5.588	7.079	4.834	24.243
106	EFF12-106	pow(abs(l1), sub(l4, mul(l3, l4)))	14	10.408	8.533	10.925	6.699	36.565
107	EFF12-107	pow(protectedNeg(l2), sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), protectedDiv(l3, add(- 1, l2))))	18	14.532	12.538	11.781	11.013	49.864
108	EFF12-108	abs(protectedDiv(protectedDiv(0, l4), add(l2, l2)))	0	0	0	0	0	0
109	EFF12-109	add(sub(l3, add(add(sub(l4, 1), 1), 1)), mul(l1, protectedDiv(abs(l4), l4)))	18	14.532	12.538	11.781	11.013	49.864
110	EFF12-110	pow(abs(l1), protectedDiv(l3, l4))	16	12.649	10.8835	10.8875	9.475	43.895
111	EFF12-111	add(l3, mul(1, l4))	20	15.0765	12.5845	16.122	10.129	53.912
112	EFF12-112	pow(l4, sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), pow(l3, 0)))	18	14.542	12.538	11.791	11.023	49.894
113	EFF12-113	add(sub(l1, l4), add(l3, sub(l3, mul(l3, protectedDiv(l1, l4)))))	16	12.2175	10.3505	11.013	8.64	42.221
114	EFF12-114	add(sub(l1, add(add(sub(l4, 1), l4), 1)), mul(l3, protectedDiv(abs(l4), l4)))	18	14.532	12.538	11.781	11.013	49.864
115	EFF12-115	add(sub(l1, l4), mul(l1, l1))	23	17.7045	14.977	18.951	12.6775	64.31
116	EFF12-116	mul(l2, protectedDiv(protectedDiv(l3, protectedDiv(abs(l2), l4)), l4))	0	0	0	0	0	0
117	EFF12-117	add(protectedDiv(protectedDiv(- 1, l2), l3), mul(l3, sub(l3, l2)))	14	10.409	8.5685	10.869	7.415	37.2615
118	EFF12-118	pow(mul(mul(l1, l4), abs(1)), protectedDiv(l1, l4))	16	12.304	10.3955	10.841	8.838	42.3785



119	EFF12-119	pow(l2, sub(l1, sub(l1, add(l2, sub(l3, l2))))))	9	6.742	5.588	7.079	4.834	24.243
120	EFF12-120	add(l3, add(mul(l3, l2), add(l2, sub(l2, protectedDiv(l4, l4))))))	17	13.1535	11.0955	11.8815	9.2565	45.387
121	EFF12-121	add(protectedDiv(pow(l3, mul(protectedDiv(0, l4), sub(l1, l4))), sub(l1, l1)), mul(l3, l2))	18	14.542	12.538	11.791	11.023	49.894
122	EFF12-122	l2	9	6.732	5.588	7.069	4.834	24.223
123	EFF12-123	add(sub(l1, l4), mul(l2, l2))	22	16.753	14.0385	18.1185	11.412	60.322
124	EFF12-124	add(0, add(l2, l3))	27	20.4345	17.228	21.5035	13.588	72.754
125	EFF12-125	add(l3, mul(0, l4))	0	0	0	0	0	0
126	EFF12-126	pow(protectedDiv(l1, protectedDiv(protectedDiv(l3, protectedDiv(0, l4)), l1)), l1)	13	10.0825	8.43	9.1855	7.229	34.927
127	EFF12-127	add(l4, mul(1, l4))	10	7.127	5.698	7.861	4.563	25.249
128	EFF12-128	pow(abs(add(l2, sub(l1, add(add(add(l4, 1), 1), 1)))), protectedNeg(protectedNeg(l2)))	18	13.632	11.373	12.1565	9.4245	46.586
129	EFF12-129	add(sub(l1, protectedDiv(0, l4)), mul(l3, protectedDiv(l4, l4)))	18	14.532	12.538	11.781	11.013	49.864
130	EFF12-130	add(sub(l1, l4), mul(mul(add(l3, l3), l1), add(-1, sub(l1, l1))))	23	17.7045	14.977	18.951	12.6775	64.31
131	EFF12-131	add(0, add(-1, add(l2, pow(l3, 1))))	27	20.4345	17.228	21.5035	13.588	72.754
132	EFF12-132	add(sub(l1, add(sub(l4, 1), 1)), mul(add(sub(l1, sub(l1, l3)), sub(l1, l4)), l1))	23	17.7045	14.977	18.951	12.6775	64.31
133	EFF12-133	add(abs(l3), mul(l4, protectedDiv(pow(-1, mul(l2, l3)), l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
134	EFF12-134	add(abs(l1), l4)	21	15.8065	13.1745	16.772	10.499	56.252
135	EFF12-135	add(protectedDiv(0, l3), mul(l3, l2))	14	10.4295	8.615	10.831	7.3715	37.247
136	EFF12-136	add(l4, l2)	0	0	0	0	0	0
137	EFF12-137	add(protectedDiv(protectedDiv(-1, l2), l3), mul(l1, l2))	18	13.486	11.2035	11.1945	9.3335	45.2175
138	EFF12-138	add(sub(l3, l2), l4)	21	15.8065	13.1645	16.912	10.559	56.442
139	EFF12-139	l2	9	6.732	5.588	7.069	4.834	24.223
140	EFF12-140	add(protectedDiv(0, l4), mul(l3, l2))	18	14.532	12.538	11.781	11.013	49.864
141	EFF12-141	add(sub(l3, add(add(l4, l1), 1)), mul(l3, protectedDiv(abs(l4), l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
142	EFF12-142	pow(protectedNeg(l2), sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), add(l1, l3)))	19	15.274	13.1465	12.515	11.518	52.4535
143	EFF12-143	mul(l2, protectedDiv(l4, l4))	18	14.532	12.538	11.781	11.013	49.864

144	EFF12-144	add(0, 0)	0	0	0	0	0	0
145	EFF12-145	pow(protectedNeg(protectedNeg(l2)), sub(l4, protectedDiv(l3, protectedDiv(0, l4))))	10	7.127	5.698	7.861	4.563	25.249
146	EFF12-146	add(sub(l1, l4), mul(add(sub(l1, sub(l1, add(l2, sub(l4, l2)))), sub(l1, l4)), l1))	23	17.7045	14.977	18.951	12.6775	64.31
147	EFF12-147	add(sub(l1, l4), mul(l1, abs(add(add(l1, l1), l1))))	23	17.7045	14.977	18.951	12.6775	64.31
148	EFF12-148	add(protectedDiv(pow(l3, mul(protectedDiv(protectedDiv(mul(l1, l1), abs(l2)), l4), 0)), sub(l1, l1)), mul(l3, l2))	0	0	0	0	0	0
149	EFF12-149	add(abs(l1), l4)	21	15.8065	13.1745	16.772	10.499	56.252
150	EFF12-150	add(pow(1, l1), protectedNeg(l2))	10	7.127	5.698	7.861	4.563	25.249
151	EFF12-151	add(sub(l1, l4), mul(add(pow(l3, l4), sub(l1, add(l3, 0))), sub(l4, l2)))	16	11.5085	9.4575	11.814	7.268	40.048
152	EFF12-152	abs(protectedNeg(l1))	0	0	0	0	0	0
153	EFF12-153	pow(l2, sub(l1, sub(l1, add(l2, sub(l3, protectedDiv(0, l4))))))	9	6.742	5.588	7.079	4.834	24.243
154	EFF12-154	add(protectedDiv(pow(mul(protectedDiv(l4, l2), abs(l1)), mul(protectedDiv(0, l4), sub(l1, l4))), sub(l1, l1)), mul(l3, l2))	18	14.532	12.538	11.781	11.013	49.864
155	EFF12-155	pow(l3, sub(pow(l3, mul(l4, l3)), pow(l3, 0)))	10	7.263	5.8075	8.032	4.6035	25.706
156	EFF12-156	abs(protectedDiv(l3, protectedDiv(0, l1)))	0	0	0	0	0	0
157	EFF12-157	pow(abs(l2), mul(l3, l1))	16	12.6525	10.844	11.478	9.7925	44.767
158	EFF12-158	add(protectedDiv(l1, sub(l1, l1)), mul(l3, l2))	0	0	0	0	0	0
159	EFF12-159	add(l3, mul(l3, pow(l3, l4)))	16	11.404	9.1245	11.422	7.056	39.0065
160	EFF12-160	add(protectedDiv(protectedDiv(-1, l2), 1), mul(l1, l2))	15	11.335	9.3555	9.2645	7.9355	37.8905

The values of FVe and fitness score of individuals in Generation 13 (on training set)

id	EFF	Experssion	FVe	fitness score				
				FMI	JC	PR	RR	SUMFs
1	EFF13-1	add(sub(l1, l4), mul(add(pow(l3, l4), sub(l1, add(l3, l2))), sub(l4, l2)))	12	8.753	7.234	9.0215	5.5535	30.562
2	EFF13-2	add(l3, add(mul(l3, l2), add(l2, sub(l2, protectedDiv(l4, l4)))))	17	13.1535	11.0955	11.8815	9.2565	45.387
3	EFF13-3	add(protectedDiv(0, l4), mul(sub(l2, protectedDiv(l4, l4)), l2))	18	14.532	12.538	11.781	11.013	49.864
4	EFF13-4	add(sub(l1, pow(-1, l1)), mul(protectedNeg(l1), add(l3, l4)))	32	24.568	20.948	26.449	18.56	90.525
5	EFF13-5	abs(protectedDiv(mul(l2, protectedDiv(l1, l1)), l2))	19	14.405	12.089	13.6505	10.312	50.4565
6	EFF13-6	add(protectedDiv(pow(l3, mul(protectedDiv(0, l4), l3)), sub(l1, l1)), mul(l3, l2))	18	14.542	12.538	11.791	11.023	49.894
7	EFF13-7	add(l4, l1)	21	15.8065	13.1745	16.772	10.499	56.252
8	EFF13-8	pow(abs(add(l2, sub(abs(l1), add(mul(add(l3, l3), l1), 1))), protectedNeg(protectedNeg(l2)))	18	13.146	10.643	13.811	7.798	45.398
9	EFF13-9	sub(pow(abs(l2), add(l1, l3)), l3)	24	18.3785	15.544	19.6685	13.0155	66.6065
10	EFF13-10	add(l1, abs(l4))	21	15.8065	13.1745	16.772	10.499	56.252
11	EFF13-11	pow(mul(mul(1, l4), abs(1)), protectedDiv(l1, l4))	10	7.332	5.985	6.512	5.21	25.039
12	EFF13-12	add(protectedDiv(protectedDiv(-1, l2), 1), mul(l1, l2))	15	11.335	9.3555	9.2645	7.9355	37.8905
13	EFF13-13	add(l3, l3)	0	0	0	0	0	0
14	EFF13-14	add(sub(l1, l4), mul(add(pow(l3, l4), l1), sub(l4, l2)))	9	6.549	5.284	7.302	4.426	23.561
15	EFF13-15	add(sub(protectedDiv(protectedDiv(-1, l2), 1), l4), mul(mul(add(l3, l3), l1), add(-1, sub(l1, l1))))	11	8.184	6.726	8.25	5.817	28.977
16	EFF13-16	add(protectedDiv(l3, l4), mul(add(protectedDiv(l3, 0), sub(l1, add(l3, 0))), l1))	0	0	0	0	0	0
17	EFF13-17	add(sub(l1, l4), mul(add(sub(l1, sub(l1, add(l2, sub(l4, l2)))), sub(l1, l4)), l1))	23	17.7045	14.977	18.951	12.6775	64.31
18	EFF13-18	add(sub(l1, l4), add(l3, sub(l3, mul(l3, protectedDiv(l1, l4)))))	16	12.2175	10.3505	11.013	8.64	42.221
19	EFF13-19	add(l1, mul(l3, add(-1, add(l2, sub(l2, protectedDiv(l4, l4)))))	13	9.471	7.617	9.2285	5.209	31.5255
20	EFF13-20	add(sub(l1, protectedDiv(l4, l4)), mul(l3, protectedDiv(abs(l4), l4)))	18	14.532	12.538	11.781	11.013	49.864
21	EFF13-21	mul(add(l4, l3), mul(l3, abs(l3)))	22	16.425	13.6215	17.504	10.9875	58.538
22	EFF13-22	mul(add(l4, l3), mul(protectedDiv(l1, l4), abs(l3)))	17	12.095	9.849	13.064	7.63	42.638

23	EFF13-23	$\text{pow}(l3, \text{sub}(l3, l1))$	0	0	0	0	0	0
24	EFF13-24	$\text{add}(-1, \text{add}(-1, \text{add}(l2, \text{sub}(l2, \text{protectedDiv}(l4, l4)))))$	18	14.532	12.538	11.781	11.013	49.864
25	EFF13-25	$\text{abs}(l3)$	0	0	0	0	0	0
26	EFF13-26	$\text{pow}(1, \text{sub}(\text{pow}(l3, \text{mul}(\text{protectedNeg}(\text{protectedDiv}(0, l4)), \text{protectedDiv}(l4, l4))), \text{protectedDiv}(l3, \text{protectedDiv}(0, l4))))$	0	0	0	0	0	0
27	EFF13-27	$\text{add}(\text{sub}(l1, l4), \text{add}(\text{mul}(1, l4), \text{sub}(l3, \text{mul}(l3, \text{protectedDiv}(l1, l4)))))$	18	13.9065	11.8815	12.251	9.5465	47.5855
28	EFF13-28	$\text{add}(l1, \text{mul}(\text{add}(\text{sub}(0, 1), \text{protectedDiv}(l4, l4)), l4))$	13	9.471	7.617	9.2285	5.209	31.5255
29	EFF13-29	$\text{pow}(l4, \text{protectedNeg}(\text{sub}(l2, \text{protectedDiv}(l4, \text{add}(l4, \text{sub}(l1, l4)))))$	12	8.997	7.4705	9.18	6.621	32.2685
30	EFF13-30	$\text{add}(\text{sub}(l1, \text{add}(\text{add}(\text{add}(l4, 1), 1), 1)), l2)$	22	16.753	14.0385	18.1185	11.412	60.322
31	EFF13-31	$\text{add}(l3, \text{add}(\text{mul}(l3, l2), \text{add}(l2, \text{sub}(l2, \text{protectedDiv}(\text{protectedDiv}(\text{add}(l1, l3), \text{add}(l2, l2)), l4)))))$	0	0	0	0	0	0
32	EFF13-32	$\text{add}(\text{sub}(l4, l4), \text{abs}(l1))$	0	0	0	0	0	0
33	EFF13-33	$\text{add}(\text{sub}(l4, l4), \text{abs}(l1))$	0	0	0	0	0	0
34	EFF13-34	$\text{add}(\text{sub}(l1, \text{add}(\text{add}(\text{sub}(l4, \text{abs}(l3)), l4), 1)), 0)$	9	6.732	5.588	7.069	4.834	24.223
35	EFF13-35	$\text{pow}(\text{protectedNeg}(l2), \text{sub}(\text{pow}(l3, \text{mul}(\text{pow}(1, l1), l3)), \text{protectedDiv}(l3, \text{add}(-1, l2))))$	13	9.609	7.9085	10.179	6.665	34.3615
36	EFF13-36	$\text{add}(\text{sub}(l3, \text{add}(\text{add}(l4, l4), 1)), \text{mul}(l3, \text{protectedDiv}(\text{protectedDiv}(l3, \text{protectedDiv}(\text{abs}(l2), l4)), l4)))$	16	13.032	11.258	10.031	9.793	44.114
37	EFF13-37	$\text{add}(l1, \text{abs}(\text{protectedNeg}(l2)))$	24	18.3785	15.544	19.6685	13.0155	66.6065
38	EFF13-38	$\text{add}(\text{abs}(l3), \text{mul}(l4, \text{protectedDiv}(\text{pow}(-1, \text{mul}(l2, l3)), l4)))$	17	13.1535	11.0955	11.8815	9.2565	45.387
39	EFF13-39	$\text{abs}(l1)$	0	0	0	0	0	0
40	EFF13-40	$\text{pow}(\text{protectedDiv}(l1, \text{abs}(l2)), \text{protectedNeg}(\text{sub}(\text{abs}(\text{mul}(l3, l2)), \text{add}(l4, 1))))$	12	8.6725	7	9.1635	5.7385	30.5745
41	EFF13-41	$\text{add}(\text{sub}(l1, l4), \text{mul}(\text{add}(l3, 0), \text{add}(-1, 0)))$	23	17.7045	14.977	18.951	12.6775	64.31
42	EFF13-42	$\text{add}(\text{sub}(l3, \text{mul}(l3, \text{protectedDiv}(l1, l4))), -1)$	16	12.2175	10.3505	11.013	8.64	42.221
43	EFF13-43	$\text{add}(l1, \text{mul}(l3, -1))$	0	0	0	0	0	0
44	EFF13-44	$\text{add}(\text{protectedDiv}(l3, l4), \text{mul}(\text{add}(\text{protectedDiv}(l3, l4), l1), l1))$	15	10.6255	8.4465	11.2675	6.5215	36.861
45	EFF13-45	$\text{sub}(\text{abs}(\text{abs}(l3)), \text{abs}(l4))$	27	20.4345	17.228	21.5035	13.588	72.754
46	EFF13-46	$\text{add}(\text{sub}(l1, l4), \text{mul}(\text{add}(\text{pow}(l3, l4), \text{sub}(l1, \text{add}(l3, 0))), l3))$	13	9.386	7.5525	10.14	5.6795	32.758
47	EFF13-47	$\text{pow}(\text{abs}(l1), \text{protectedDiv}(\text{abs}(l3), l4))$	16	12.649	10.8835	10.8875	9.475	43.895

48	EFF13-48	add(sub(l3, add(add(l3, l4), 1)), mul(l3, protectedDiv(abs(l4), l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
49	EFF13-49	add(sub(l1, l4), protectedDiv(l2, l4))	17	12.0745	9.6415	12.7635	7.4395	41.919
50	EFF13-50	add(sub(l1, l4), mul(add(l3, 0), l1))	20	14.6625	12.089	15.8175	10.315	52.884
51	EFF13-51	add(l1, mul(l3, pow(l3, l4)))	14	10.618	8.841	10.854	6.668	36.981
52	EFF13-52	add(l4, l2)	0	0	0	0	0	0
53	EFF13-53	pow(mul(mul(l1, l4), abs(l3)), l1)	14	10.5725	8.803	9.5275	7.7225	36.6255
54	EFF13-54	pow(l4, protectedNeg(sub(l2, protectedDiv(l4, add(l4, l1)))))	12	8.997	7.4705	9.18	6.621	32.2685
55	EFF13-55	pow(abs(protectedNeg(protectedDiv(0, l4))), mul(l3, l1))	15	11.472	9.5735	10.687	8.1325	39.865
56	EFF13-56	add(protectedDiv(l4, l4), mul(add(pow(l3, l4), sub(l1, add(l3, 0))), sub(l4, l2)))	13	9.471	7.617	9.2285	5.209	31.5255
57	EFF13-57	add(sub(mul(mul(l1, l4), abs(l3)), l2), l4)	8	5.878	4.754	6.509	3.947	21.088
58	EFF13-58	add(sub(protectedDiv(mul(l2, l2), l1), l4), mul(add(l3, 0), add(-1, 0)))	19	14.3365	11.976	15.762	9.0645	51.139
59	EFF13-59	add(sub(l1, add(l3, 1)), 0)	0	0	0	0	0	0
60	EFF13-60	add(0, l2)	9	6.732	5.588	7.069	4.834	24.223
61	EFF13-61	add(l3, add(mul(l3, l2), add(l2, sub(l2, protectedDiv(l2, l4)))))	14	10.618	8.841	10.844	6.668	36.971
62	EFF13-62	add(protectedDiv(pow(l3, mul(protectedDiv(0, l4), 0)), sub(l1, mul(l3, abs(l3)))), mul(l3, l2))	16	12.343	10.37	10.757	8.989	42.459
63	EFF13-63	add(sub(l1, l4), 0)	24	18.3785	15.544	19.6685	13.0155	66.6065
64	EFF13-64	pow(mul(mul(l1, l4), abs(l3)), protectedDiv(l1, l4))	14	10.501	8.808	10.397	7.7035	37.4095
65	EFF13-65	add(l3, add(-1, add(add(add(sub(l4, 1), l4), 1), sub(l2, protectedDiv(l4, l4)))))	17	13.1535	11.0955	11.8815	9.2565	45.387
66	EFF13-66	add(abs(l1), abs(l2))	24	18.3785	15.544	19.6685	13.0155	66.6065
67	EFF13-67	add(mul(add(sub(l1, sub(l1, l3)), sub(l1, l4)), l1), mul(l3, protectedDiv(protectedDiv(l3, protectedDiv(abs(l2), l4)), l4)))	16	13.032	11.258	10.031	9.793	44.114
68	EFF13-68	add(l1, abs(l3))	0	0	0	0	0	0
69	EFF13-69	add(sub(l1, mul(l3, l1)), 0)	0	0	0	0	0	0
70	EFF13-70	abs(protectedDiv(mul(sub(l1, add(add(add(l4, 1), 1), 1)), l2), l1))	14	10.1445	8.2905	10.773	6.4835	35.6915
71	EFF13-71	add(protectedDiv(pow(mul(protectedDiv(0, l2), abs(l1)), mul(protectedDiv(0, l4), sub(l1, l4))), sub(l1, l1)), mul(l3, l2))	18	14.532	12.538	11.781	11.013	49.864

72	EFF13-72	$\text{pow}(\text{abs}(l2), \text{mul}(l3, l1))$	16	12.6525	10.844	11.478	9.7925	44.767
73	EFF13-73	$\text{add}(\text{sub}(l3, \text{add}(\text{add}(\text{sub}(l4, 1), 1), 1)), \text{mul}(l1, \text{protectedDiv}(\text{abs}(\text{mul}(l3, l4)), l4)))$	12	8.846	7.2165	8.5835	5.379	30.025
74	EFF13-74	$\text{add}(\text{sub}(l3, l2), l4)$	21	15.8065	13.1645	16.912	10.559	56.442
75	EFF13-75	$\text{pow}(l3, \text{protectedDiv}(\text{sub}(l1, l4), l4))$	17	12.1795	9.7575	13.0715	7.4685	42.477
76	EFF13-76	$\text{pow}(\text{abs}(\text{add}(l2, \text{sub}(\text{abs}(l1), \text{protectedNeg}(l3)))), \text{protectedNeg}(\text{protectedNeg}(l2)))$	9	6.732	5.588	7.069	4.834	24.223
77	EFF13-77	$\text{pow}(\text{abs}(l1), \text{mul}(l2, l2))$	17	12.4425	10.113	12.584	6.9775	42.117
78	EFF13-78	$\text{pow}(\text{abs}(\text{add}(l2, \text{sub}(\text{abs}(l1), \text{add}(\text{mul}(\text{add}(l3, \text{sub}(l1, l4)), l1), 1))), \text{protectedNeg}(\text{protectedNeg}(l2)))$	17	12.4145	10.0595	12.3115	6.9165	41.702
79	EFF13-79	$\text{add}(l2, \text{add}(l1, l1))$	23	17.7045	14.977	18.951	12.6775	64.31
80	EFF13-80	$\text{add}(\text{protectedDiv}(l3, l4), \text{mul}(\text{add}(\text{protectedDiv}(l3, l4), \text{sub}(l1, \text{add}(l3, 0))), l1))$	15	10.6255	8.4465	11.2675	6.5215	36.861
81	EFF13-81	$\text{add}(\text{protectedDiv}(\text{pow}(l3, \text{mul}(\text{protectedDiv}(l3, l4), 0)), \text{sub}(l1, l1)), \text{mul}(l3, l2))$	18	14.542	12.538	11.791	11.023	49.894
82	EFF13-82	$\text{pow}(\text{protectedDiv}(l1, \text{protectedDiv}(\text{protectedDiv}(l3, \text{protectedDiv}(0, l4)), l1)), l2)$	18	14.532	12.538	11.781	11.013	49.864
83	EFF13-83	$\text{add}(\text{add}(\text{protectedDiv}(\text{abs}(\text{add}(l3, 0)), l4), l1), l4)$	12	8.869	7.3185	9.309	6.025	31.5215
84	EFF13-84	$\text{add}(\text{sub}(l1, l4), l1)$	23	17.7045	14.977	18.951	12.6775	64.31
85	EFF13-85	$\text{abs}(\text{protectedDiv}(\text{add}(l1, l3), \text{add}(l2, l2)))$	10	7.127	5.698	7.861	4.563	25.249
86	EFF13-86	$\text{add}(\text{sub}(l1, l4), \text{mul}(\text{add}(\text{pow}(\text{add}(l2, l2), l4), \text{sub}(l1, \text{add}(l3, 0))), \text{sub}(l4, l2)))$	18	12.941	10.537	13.486	8.236	45.2
87	EFF13-87	$\text{add}(l3, l2)$	27	20.4345	17.228	21.5035	13.588	72.754
88	EFF13-88	$\text{add}(l3, 0)$	0	0	0	0	0	0
89	EFF13-89	$\text{add}(\text{abs}(l3), \text{mul}(l1, \text{protectedDiv}(\text{pow}(-1, \text{mul}(l2, l3)), l4)))$	13	9.439	7.726	9.363	6.0855	32.6135
90	EFF13-90	$\text{pow}(\text{protectedDiv}(l1, \text{abs}(l2)), \text{protectedNeg}(\text{sub}(\text{mul}(\text{protectedDiv}(l1, l3), \text{protectedDiv}(l3, l3)), \text{add}(\text{mul}(\text{add}(l3, \text{sub}(l4, l4)), l1), 1))))$	24	18.372	15.438	18.307	12.2695	64.3865
91	EFF13-91	$\text{abs}(l1)$	0	0	0	0	0	0
92	EFF13-92	$\text{add}(l4, \text{mul}(\text{protectedDiv}(\text{protectedNeg}(l4), \text{sub}(l2, l2)), l4))$	18	14.532	12.538	11.781	11.013	49.864
93	EFF13-93	$\text{pow}(l3, \text{sub}(l1, l1))$	0	0	0	0	0	0
94	EFF13-94	$\text{add}(\text{sub}(l1, \text{add}(\text{add}(\text{sub}(l4, 1), l4), 1)), l4)$	24	18.3785	15.544	19.6685	13.0155	66.6065

95	EFF13-95	add(l4, l1)	21	15.8065	13.1745	16.772	10.499	56.252
96	EFF13-96	add(l4, l1)	21	15.8065	13.1745	16.772	10.499	56.252
97	EFF13-97	mul(add(l4, l3), mul(protectedDiv(l4, l1), abs(l3)))	15	12.033	10.5255	11.218	8.3405	42.117
98	EFF13-98	add(l2, sub(l1, l4))	22	16.753	14.0385	18.1185	11.412	60.322
99	EFF13-99	add(l4, l1)	21	15.8065	13.1745	16.772	10.499	56.252
100	EFF13-100	pow(protectedDiv(l1, abs(l2)), protectedNeg(sub(abs(mul(l3, mul(l3, protectedDiv(abs(l4), l4)))), add(mul(add(l3, sub(l4, l4)), l1), 1))))	9	7.5615	6.728	6.689	5.9625	26.941
101	EFF13-101	abs(protectedDiv(mul(l2, protectedDiv(l4, l1)), l1))	0	0	0	0	0	0
102	EFF13-102	add(sub(l1, l2), mul(l1, abs(add(add(l1, l1), l1))))	22	16.425	13.6215	17.504	10.9875	58.538
103	EFF13-103	add(l1, mul(l3, l4))	15	11.106	9.0275	11.656	7.1565	38.946
104	EFF13-104	add(protectedDiv(protectedDiv(-1, l2), protectedDiv(abs(l4), l4)), mul(add(l3, sub(l4, l4)), l2))	18	14.532	12.538	11.781	11.013	49.864
105	EFF13-105	add(sub(l1, l4), mul(l1, l1))	23	17.7045	14.977	18.951	12.6775	64.31
106	EFF13-106	add(-1, protectedNeg(l2))	10	7.127	5.698	7.861	4.563	25.249
107	EFF13-107	add(sub(protectedNeg(0), abs(l4)), mul(l3, protectedDiv(abs(l4), l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
108	EFF13-108	add(sub(1, sub(l4, l3)), mul(l3, l4))	17	12.714	10.5645	12.792	8.416	44.4865
109	EFF13-109	add(l3, mul(1, l4))	20	15.0765	12.5845	16.122	10.129	53.912
110	EFF13-110	add(l3, add(mul(l3, mul(mul(l1, l4), abs(1))), add(l2, sub(l2, protectedDiv(l4, l4)))))	12	8.846	7.2165	8.5835	5.379	30.025
111	EFF13-111	add(l3, add(mul(l3, l2), sub(l1, add(l2, sub(l4, l2)))))	11	8.148	6.7015	8.617	5.8425	29.309
112	EFF13-112	add(-1, protectedDiv(l4, -1))	9	6.732	5.588	7.069	4.834	24.223
113	EFF13-113	pow(protectedNeg(l2), sub(protectedDiv(protectedDiv(l3, protectedDiv(abs(l2), l4)), l4), protectedDiv(l3, add(-1, l2))))	16	13.032	11.258	10.031	9.793	44.114
114	EFF13-114	pow(protectedDiv(l1, abs(l2)), protectedNeg(sub(abs(mul(l3, l2)), add(mul(add(l3, sub(l4, l4)), l1), 1))))	17	13.0655	11.1355	12.957	8.9635	46.1215
115	EFF13-115	abs(protectedDiv(mul(l2, l2), l1))	7	5.14	4.18	5.49	3.71	18.52
116	EFF13-116	add(l3, add(-1, add(l1, sub(l2, protectedDiv(l4, l4)))))	18	14.532	12.538	11.781	11.013	49.864
117	EFF13-117	sub(pow(abs(l2), add(l1, l3)), mul(l3, l4))	17	12.0745	9.6415	12.7635	7.4395	41.919
118	EFF13-118	pow(protectedDiv(l1, abs(l2)), protectedNeg(sub(abs(mul(l3, l2)), add(mul(add(l3, sub(l4, l4)), l1), sub(l1, l1)))))	19	14.5065	12.238	14.8135	9.7425	51.3005

119	EFF13-119	pow(protectedNeg(l2), sub(pow(l3, mul(protectedNeg(protectedDiv(-1, l4)), l3)), protectedDiv(l3, add(-1, l2))))	18	14.532	12.538	11.781	11.013	49.864
120	EFF13-120	add(protectedDiv(0, l4), mul(l3, protectedDiv(protectedDiv(l3, protectedDiv(abs(l2), l4)), l4)))	16	13.032	11.258	10.031	9.793	44.114
121	EFF13-121	sub(pow(abs(l1), add(l2, l3)), l4)	21	15.312	12.575	16.092	9.9485	53.9275
122	EFF13-122	add(sub(l3, l2), l2)	0	0	0	0	0	0
123	EFF13-123	add(l4, l1)	21	15.8065	13.1745	16.772	10.499	56.252
124	EFF13-124	add(sub(l3, add(add(sub(protectedNeg(protectedDiv(0, l4)), 1), 1), 1)), mul(l1, protectedDiv(abs(mul(l3, l4)), l4)))	12	8.846	7.2165	8.5835	5.379	30.025
125	EFF13-125	add(protectedDiv(protectedDiv(-1, l2), protectedDiv(abs(l4), l4)), l1)	18	14.532	12.538	11.781	11.013	49.864
126	EFF13-126	pow(protectedNeg(l2), sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), protectedDiv(l4, l4))), protectedDiv(l3, protectedDiv(0, l4))))	16	13.032	11.258	10.031	9.793	44.114
127	EFF13-127	add(protectedDiv(protectedDiv(-1, l2), protectedDiv(sub(l4, l2), pow(l1, l3))), mul(l1, l2))	9	6.312	5.0525	7.113	3.9315	22.409
128	EFF13-128	pow(abs(l3), protectedNeg(protectedNeg(l2)))	13	9.719	8.0385	10.279	6.775	34.8115
129	EFF13-129	pow(abs(add(l2, sub(l1, add(add(add(l4, 1), 1), 1))), protectedNeg(protectedNeg(l2)))	18	13.632	11.373	12.1565	9.4245	46.586
130	EFF13-130	add(sub(l1, add(add(sub(l4, 1), l4), mul(mul(l1, l4), abs(1)))), mul(l3, protectedDiv(abs(l4), l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
131	EFF13-131	add(0, l4)	10	7.127	5.698	7.861	4.563	25.249
132	EFF13-132	pow(protectedNeg(l3), sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), protectedDiv(l3, add(-1, l2))))	12	9.352	7.966	8.306	6.749	32.373
133	EFF13-133	pow(protectedNeg(l2), sub(l4, protectedDiv(l3, l1)))	13	9.722	8.074	10.3215	6.35	34.4675
134	EFF13-134	add(sub(l3, add(add(sub(l4, 1), l4), l4)), mul(l3, protectedDiv(abs(l4), l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
135	EFF13-135	pow(mul(mul(l1, l4), sub(l1, l4)), protectedDiv(l1, l4))	12	8.972	7.466	8.187	6.3655	30.9905
136	EFF13-136	pow(l4, abs(l4))	0	0	0	0	0	0
137	EFF13-137	add(sub(l1, pow(l4, l1)), mul(protectedNeg(l1), add(l3, l4)))	28	21.9065	18.8135	23.3275	17.201	81.2485



138	EFF13-138	add(l4, mul(sub(l3, l2), l4))	14	10.618	8.841	10.844	6.668	36.971
139	EFF13-139	add(sub(l1, add(sub(l4, 1), 1)), mul(add(sub(l1, sub(l1, l3)), sub(l1, l4)), l1))	23	17.7045	14.977	18.951	12.6775	64.31
140	EFF13-140	add(l3, mul(l3, pow(sub(l4, l1), l4)))	12	9.663	8.42	8.677	7.609	34.369
141	EFF13-141	abs(protectedDiv(add(l1, l3), add(l4, l2)))	0	0	0	0	0	0
142	EFF13-142	add(sub(l1, add(add(sub(l4, 1), l4), 1)), mul(l3, protectedDiv(abs(sub(l4, l1)), l4)))	15	11.032	8.997	11.4615	7.1345	38.625
143	EFF13-143	add(sub(l1, add(sub(l4, 1), 1)), mul(add(sub(l1, sub(l1, l3)), sub(l1, l4)), l3))	28	21.304	18.168	22.588	14.991	77.051
144	EFF13-144	sub(pow(abs(l2), protectedDiv(abs(l4), l4)), abs(l4))	9	6.732	5.588	7.069	4.834	24.223
145	EFF13-145	add(sub(l3, add(add(sub(l4, 1), l4), l1)), mul(l3, protectedDiv(abs(l4), l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
146	EFF13-146	pow(l2, l1)	16	12.555	10.7135	11.269	9.2565	43.794
147	EFF13-147	add(sub(add(l2, l2), l1), mul(l3, l4))	18	13.414	11.1245	13.682	8.886	47.1065
148	EFF13-148	pow(l3, mul(l2, l2))	13	9.719	8.0385	10.279	6.775	34.8115
149	EFF13-149	pow(abs(add(l2, sub(abs(l1), add(mul(add(l3, protectedDiv(l1, abs(l2))), l1), 1)))), protectedNeg(protectedNeg(l2)))	17	12.4145	10.0595	12.3115	6.9165	41.702
150	EFF13-150	add(protectedDiv(l4, protectedDiv(abs(l4), l4)), mul(l3, l2))	18	14.532	12.538	11.781	11.013	49.864
151	EFF13-151	add(protectedNeg(l2), protectedDiv(0, l4))	18	14.532	12.538	11.781	11.013	49.864
152	EFF13-152	pow(abs(l1), protectedNeg(protectedNeg(l2)))	17	12.4425	10.113	12.584	6.9775	42.117
153	EFF13-153	add(sub(l1, l1), mul(l3, l4))	15	11.338	9.421	11.524	7.058	39.341
154	EFF13-154	pow(protectedNeg(l2), sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), protectedDiv(l4, l4))), protectedDiv(l3, abs(protectedDiv(l3, l4)))))	17	13.812	11.918	11.021	10.413	47.164
155	EFF13-155	l4	10	7.127	5.698	7.861	4.563	25.249
156	EFF13-156	add(sub(l1, l4), mul(add(l3, 0), add(-1, add(add(sub(l4, 1), l4), 1))))	15	11.106	9.0275	11.656	7.1565	38.946
157	EFF13-157	add(protectedDiv(protectedDiv(-1, l2), protectedDiv(abs(mul(l1, protectedDiv(abs(mul(l3, l4)), l4))), l4)), mul(l3, l2))	18	14.532	12.538	11.781	11.013	49.864
158	EFF13-158	add(sub(l1, l4), abs(l1))	23	17.7045	14.977	18.951	12.6775	64.31
159	EFF13-159	add(pow(1, l1), protectedNeg(l2))	10	7.127	5.698	7.861	4.563	25.249

160	EFF13-160	add(protectedNeg(l3), l4)	21	15.8065	13.1745	16.772	10.499	56.252
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The values of FVe and fitness score of individuals in Generation 14 (on training set)

id	EFF	Experssion	FVe	fitness score				
				FMI	JC	PR	RR	SUM <sub>FS</sub>
1	EFF14-1	add(sub(protectedNeg(sub(mul(protectedDiv(l1, l3), protectedDiv(l3, l3)), add(mul(add(l3, sub(l4, l4)), l1), 1))), add(sub(l4, 1), 1)), mul(add(sub(l1, sub(l1, l3)), sub(l1, l4)), l3))	12	8.753	7.234	9.0215	5.5535	54.738
2	EFF14-2	add(abs(protectedDiv(protectedDiv(l3, protectedDiv(abs(l2, l4)), l4)), mul(l1, protectedDiv(pow(-1, mul(l2, l3)), l4)))	17	13.1535	11.0955	11.8815	9.2565	44.114
3	EFF14-3	add(protectedDiv(l4, protectedDiv(abs(l4), l4)), mul(l3, l2))	18	14.532	12.538	11.781	11.013	49.864
4	EFF14-4	add(l1, l4)	32	24.568	20.948	26.449	18.56	56.252
5	EFF14-5	pow(protectedNeg(l2), sub(pow(l3, mul(protectedNeg(protectedDiv(-1, l4)), l3)), protectedDiv(l3, add(-1, l2))))	19	14.405	12.089	13.6505	10.312	49.864
6	EFF14-6	add(protectedDiv(0, l4), mul(sub(l2, protectedDiv(l4, l4)), l2))	18	14.542	12.538	11.791	11.023	49.864
7	EFF14-7	add(sub(l1, add(add(l4, 1), 1)), mul(add(sub(l1, sub(l1, l3)), sub(l1, l4)), l3))	21	15.8065	13.1745	16.772	10.499	77.051
8	EFF14-8	add(protectedNeg(l2), protectedDiv(0, l4))	18	13.146	10.643	13.811	7.798	49.864
9	EFF14-9	pow(mul(mul(l1, l4), sub(l1, l4)), protectedDiv(l2, l4))	24	18.3785	15.544	19.6685	13.0155	25.249
10	EFF14-10	add(l3, add(-1, add(add(add(sub(l4, 1), sub(l1, add(add(add(l4, 1), 1), 1))), 1), sub(l2, protectedDiv(l4, l4))))	21	15.8065	13.1745	16.772	10.499	49.864
11	EFF14-11	pow(protectedDiv(l1, abs(l2)), protectedNeg(sub(abs(mul(l3, l2)), add(mul(add(l3, sub(protectedNeg(add(l2, l2)), l4)), l1), sub(l1, l1))))	10	7.332	5.985	6.512	5.21	56.7075
12	EFF14-12	pow(abs(add(l2, sub(l3, add(add(sub(l4, 1), l4), l4))), protectedNeg(protectedNeg(l2)))	15	11.335	9.3555	9.2645	7.9355	29.309
13	EFF14-13	add(sub(l1, l4), mul(add(pow(l3, l4), l1), sub(l4, l2)))	0	0	0	0	0	23.561
14	EFF14-14	pow(protectedNeg(l2), sub(pow(l3, mul(protectedNeg(protectedDiv(-1, l4)), l3)), protectedDiv(l3, add(l1, l2))))	9	6.549	5.284	7.302	4.426	49.5455
15	EFF14-15	pow(mul(mul(l1, l4), sub(l1, l4)), protectedDiv(l1, l4))	11	8.184	6.726	8.25	5.817	30.9905

16	EFF14-16	add(sub(l1, add(sub(l4, 1), 1)), mul(add(sub(protectedNeg(protectedNeg(l2)), sub(l1, l3)), sub(l1, l4)), l1))	0	0	0	0	0	51.302
17	EFF14-17	add(sub(mul(mul(l1, l4), abs(abs(pow(l3, l3)))), l2), l4)	23	17.7045	14.977	18.951	12.6775	24.8715
18	EFF14-18	add(-1, add(-1, add(l2, sub(mul(l2, l2), protectedDiv(l4, l4)))))	16	12.2175	10.3505	11.013	8.64	49.864
19	EFF14-19	add(protectedDiv(pow(l3, mul(protectedDiv(0, l4), 0)), sub(l1, mul(l3, abs(l3)))), mul(l2, l2))	13	9.471	7.617	9.2285	5.209	42.459
20	EFF14-20	add(sub(l3, l2), l4)	18	14.532	12.538	11.781	11.013	56.442
21	EFF14-21	add(protectedDiv(0, l4), mul(sub(l2, protectedDiv(l4, l4)), l2))	22	16.425	13.6215	17.504	10.9875	49.864
22	EFF14-22	add(sub(l1, l4), protectedDiv(l2, l4))	17	12.095	9.849	13.064	7.63	41.919
23	EFF14-23	add(sub(1, sub(l4, l3)), mul(l3, l4))	0	0	0	0	0	44.4865
24	EFF14-24	add(sub(l1, l4), add(l3, sub(l3, mul(l3, protectedDiv(l4, l4)))))	18	14.532	12.538	11.781	11.013	49.864
25	EFF14-25	add(sub(l3, l4), mul(l3, protectedDiv(abs(l4), l4)))	0	0	0	0	0	45.387
26	EFF14-26	add(l3, l1)	0	0	0	0	0	0
27	EFF14-27	pow(abs(add(l2, sub(abs(l1), protectedNeg(l3)))), protectedNeg(protectedNeg(l2)))	18	13.9065	11.8815	12.251	9.5465	24.223
28	EFF14-28	add(l3, add(mul(l3, l2), add(l2, l3)))	13	9.471	7.617	9.2285	5.209	35.0925
29	EFF14-29	pow(abs(add(l2, sub(l1, pow(l4, 0)))), protectedNeg(protectedNeg(l2)))	12	8.997	7.4705	9.18	6.621	42.117
30	EFF14-30	pow(mul(sub(l1, 1), abs(l3)), l1)	22	16.753	14.0385	18.1185	11.412	0
31	EFF14-31	add(protectedDiv(pow(l3, mul(protectedDiv(l3, l4), 0)), sub(l1, l1)), abs(l4))	0	0	0	0	0	49.894
32	EFF14-32	pow(abs(protectedNeg(l2)), protectedNeg(protectedNeg(l2)))	0	0	0	0	0	0
33	EFF14-33	add(l3, l2)	0	0	0	0	0	72.754
34	EFF14-34	pow(protectedNeg(l3), sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), protectedDiv(l3, add(-1, l2))))	9	6.732	5.588	7.069	4.834	32.373
35	EFF14-35	sub(abs(abs(l3)), abs(l4))	13	9.609	7.9085	10.179	6.665	72.754
36	EFF14-36	pow(protectedNeg(l2), sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), protectedDiv(l4, l4)), protectedDiv(l3, protectedDiv(0, l4))))	16	13.032	11.258	10.031	9.793	44.114
37	EFF14-37	pow(protectedNeg(l2), sub(l4, protectedDiv(0, l1)))	24	18.3785	15.544	19.6685	13.0155	33.7445

38	EFF14-38	add(protectedDiv(protectedDiv(-1, l2), 1), l3)	17	13.1535	11.0955	11.8815	9.2565	29.309
39	EFF14-39	pow(abs(add(l2, sub(l1, add(add(add(l4, l2), 1), 1)))), protectedNeg(protectedNeg(l2)))	0	0	0	0	0	46.586
40	EFF14-40	add(protectedDiv(1, l4), mul(sub(l2, protectedDiv(l4, l4)), l2))	12	8.6725	7	9.1635	5.7385	49.864
41	EFF14-41	add(sub(l1, l4), sub(l1, add(add(add(l4, 1), 1), 1)))	23	17.7045	14.977	18.951	12.6775	66.6065
42	EFF14-42	add(l3, mul(l3, pow(sub(l4, l1), l4)))	16	12.2175	10.3505	11.013	8.64	34.369
43	EFF14-43	add(l3, add(mul(l3, l2), add(l2, sub(l2, l3))))	0	0	0	0	0	29.309
44	EFF14-44	add(l3, add(l1, add(add(add(sub(l4, 1), l4), 1), sub(l2, protectedDiv(l4, l4)))))	15	10.6255	8.4465	11.2675	6.5215	49.864
45	EFF14-45	pow(protectedNeg(l2), l1)	27	20.4345	17.228	21.5035	13.588	40.4865
46	EFF14-46	pow(abs(l1), protectedNeg(protectedNeg(l2)))	13	9.386	7.5525	10.14	5.6795	42.117
47	EFF14-47	add(protectedNeg(l2), sub(l2, protectedDiv(l4, l4)))	16	12.649	10.8835	10.8875	9.475	49.864
48	EFF14-48	pow(abs(abs(l1)), protectedNeg(protectedNeg(l2)))	17	13.1535	11.0955	11.8815	9.2565	42.117
49	EFF14-49	add(sub(l3, add(add(sub(l4, protectedDiv(l4, l4)), l4), l4)), mul(l3, protectedDiv(abs(l4), l4)))	17	12.0745	9.6415	12.7635	7.4395	45.387
50	EFF14-50	add(protectedDiv(pow(l3, mul(protectedDiv(0, l4), l3)), sub(l1, l1)), mul(mul(l3, protectedDiv(l1, l4)), l2))	20	14.6625	12.089	15.8175	10.315	49.894
51	EFF14-51	add(protectedDiv(protectedDiv(-1, l2), protectedDiv(sub(l4, l2), pow(sub(l1, l4), l3))), mul(l1, l2))	14	10.618	8.841	10.854	6.668	42.848
52	EFF14-52	add(sub(l1, pow(l4, l1)), l4)	0	0	0	0	0	60.856
53	EFF14-53	sub(pow(abs(l1), add(l2, protectedDiv(0, l4))), l4)	14	10.5725	8.803	9.5275	7.7225	46.3405
54	EFF14-54	pow(l2, protectedDiv(l1, l4))	12	8.997	7.4705	9.18	6.621	43.794
55	EFF14-55	add(protectedDiv(0, l4), mul(l3, protectedDiv(protectedDiv(l3, protectedDiv(abs(l2), l4)), l4)))	15	11.472	9.5735	10.687	8.1325	44.114
56	EFF14-56	add(sub(l1, add(sub(l4, 1), 1)), mul(add(sub(l1, sub(l1, l3)), sub(l1, l4)), l3))	13	9.471	7.617	9.2285	5.209	77.051
57	EFF14-57	add(sub(l1, pow(l4, l1)), mul(protectedNeg(l2), add(l3, l4)))	8	5.878	4.754	6.509	3.947	35.331
58	EFF14-58	add(sub(l1, l4), 0)	19	14.3365	11.976	15.762	9.0645	66.6065
59	EFF14-59	add(sub(l3, add(add(sub(l4, 1), 1), 1)), mul(l1, protectedDiv(protectedDiv(l1, abs(l2)), l4)))	0	0	0	0	0	0
60	EFF14-60	add(sub(l1, l4), mul(add(pow(add(l2, l2), l4), sub(l1, add(l3, 0))), sub(l4, l2)))	9	6.732	5.588	7.069	4.834	45.2

61	EFF14-61	add(l4, l2)	14	10.618	8.841	10.844	6.668	0
62	EFF14-62	add(protectedDiv(pow(l3, mul(protectedDiv(0, l4), l3)), sub(l1, l1)), mul(l3, add(l2, sub(l4, l2))))	16	12.343	10.37	10.757	8.989	49.894
63	EFF14-63	add(l3, abs(l2))	24	18.3785	15.544	19.6685	13.0155	72.754
64	EFF14-64	add(l1, mul(add(sub(0, 1), sub(1, sub(l4, l3))), l4))	14	10.501	8.808	10.397	7.7035	38.946
65	EFF14-65	pow(protectedNeg(l3), sub(pow(l3, mul(add(add(add(l4, 1), 1), 1), l3)), protectedDiv(l3, add(-1, l2))))	17	13.1535	11.0955	11.8815	9.2565	36.6325
66	EFF14-66	pow(l3, protectedDiv(sub(l1, l4), l2))	24	18.3785	15.544	19.6685	13.0155	27.2725
67	EFF14-67	pow(protectedNeg(l2), sub(pow(l3, mul(l4, protectedDiv(l4, l4))), protectedDiv(l3, protectedDiv(0, l4))))	16	13.032	11.258	10.031	9.793	44.114
68	EFF14-68	add(l1, l1)	0	0	0	0	0	0
69	EFF14-69	pow(protectedDiv(l1, abs(0)), protectedNeg(sub(abs(mul(l3, l2)), add(l4, 1))))	0	0	0	0	0	38.829
70	EFF14-70	add(l1, mul(l3, protectedDiv(abs(l4), l4)))	14	10.1445	8.2905	10.773	6.4835	49.864
71	EFF14-71	add(sub(l1, l4), mul(add(pow(l3, l4), l4), sub(l4, l2)))	18	14.532	12.538	11.781	11.013	38.946
72	EFF14-72	pow(mul(mul(l1, l4), abs(mul(add(l3, 0), add(-1, add(add(sub(l4, 1), l4), 1))))), l1)	16	12.6525	10.844	11.478	9.7925	36.6255
73	EFF14-73	add(protectedDiv(l4, l3), mul(l3, l2))	12	8.846	7.2165	8.5835	5.379	39.824
74	EFF14-74	add(sub(l1, add(sub(l4, 1), 1)), mul(add(sub(l1, sub(l1, l1)), sub(l1, l4)), l1))	21	15.8065	13.1645	16.912	10.559	64.31
75	EFF14-75	pow(l3, protectedDiv(sub(-1, l4), l4))	17	12.1795	9.7575	13.0715	7.4685	27.953
76	EFF14-76	pow(protectedDiv(l1, abs(l2)), protectedNeg(sub(mul(protectedDiv(l1, l3), protectedDiv(l3, l3)), add(mul(add(l3, sub(l4, l4)), l1), 1))))	9	6.732	5.588	7.069	4.834	64.3865
77	EFF14-77	add(l3, mul(l3, pow(mul(l3, protectedDiv(abs(l4), l4)), l4)))	17	12.4425	10.113	12.584	6.9775	39.0065
78	EFF14-78	pow(l4, protectedNeg(sub(l2, protectedDiv(l4, add(l4, sub(l1, add(mul(add(l3, sub(l4, l4)), l1), 1)))))))	17	12.4145	10.0595	12.3115	6.9165	24.223
79	EFF14-79	add(mul(add(sub(l1, sub(l1, l3)), sub(l1, l4)), l1), mul(l3, protectedDiv(protectedDiv(l3, protectedDiv(abs(l2), l4)), l4)))	23	17.7045	14.977	18.951	12.6775	44.114
80	EFF14-80	add(protectedDiv(l4, l4), mul(l3, l4))	15	10.6255	8.4465	11.2675	6.5215	45.387
81	EFF14-81	add(sub(l1, pow(l4, l1)), protectedDiv(mul(l3, l1), mul(l3, 0)))	18	14.542	12.538	11.791	11.023	0
82	EFF14-82	pow(abs(l1), protectedNeg(protectedNeg(l3)))	18	14.532	12.538	11.781	11.013	0

83	EFF14-83	$\text{add}(\text{sub}(l1, l4), \text{mul}(\text{add}(l3, 0), \text{add}(-1, \text{add}(\text{add}(\text{sub}(l4, 1), l4), 1))))$	12	8.869	7.3185	9.309	6.025	38.946
84	EFF14-84	$\text{add}(\text{protectedDiv}(0, l4), \text{mul}(l2, \text{protectedDiv}(\text{protectedDiv}(l3, \text{protectedDiv}(\text{abs}(l2), l4)), l4)))$	23	17.7045	14.977	18.951	12.6775	0
85	EFF14-85	$\text{add}(\text{sub}(l1, \text{add}(\text{add}(\text{add}(l4, l4), 1), 1)), l2)$	10	7.127	5.698	7.861	4.563	51.818
86	EFF14-86	$\text{add}(\text{protectedNeg}(l3), \text{abs}(l2))$	18	12.941	10.537	13.486	8.236	66.6065
87	EFF14-87	$\text{add}(l3, \text{add}(\text{mul}(l3, l2), \text{add}(l3, \text{sub}(l2, \text{protectedDiv}(l2, l4)))))$	27	20.4345	17.228	21.5035	13.588	36.971
88	EFF14-88	$\text{add}(\text{protectedDiv}(\text{protectedDiv}(-1, l2), 1), \text{abs}(\text{abs}(l3)))$	0	0	0	0	0	29.309
89	EFF14-89	$\text{add}(0, l2)$	13	9.439	7.726	9.363	6.0855	24.223
90	EFF14-90	$\text{add}(\text{sub}(l1, \text{add}(\text{add}(\text{sub}(l4, 1), l4), 1)), \text{mul}(l3, \text{protectedDiv}(\text{abs}(\text{sub}(l4, l1)), l4)))$	24	18.372	15.438	18.307	12.2695	38.625
91	EFF14-91	$\text{add}(\text{abs}(l3), \text{mul}(\text{protectedNeg}(l2), \text{protectedDiv}(\text{pow}(-1, \text{mul}(l2, l3)), l4)))$	0	0	0	0	0	30.1685
92	EFF14-92	$\text{add}(\text{sub}(l1, \text{add}(\text{add}(\text{sub}(l4, 1), l4), 1)), l4)$	18	14.532	12.538	11.781	11.013	66.6065
93	EFF14-93	$\text{pow}(\text{protectedDiv}(l1, \text{abs}(l2)), \text{protectedNeg}(\text{sub}(\text{abs}(\text{mul}(l3, l2)), \text{add}(\text{mul}(\text{add}(l3, \text{sub}(l4, l4)), l1), \text{mul}(\text{protectedDiv}(l1, l3), \text{protectedDiv}(l3, l3)))))$	0	0	0	0	0	53.3785
94	EFF14-94	$\text{add}(\text{protectedDiv}(\text{protectedDiv}(-1, l2), \text{protectedDiv}(\text{abs}(l4), l4)), \text{mul}(\text{add}(l3, \text{protectedNeg}(\text{protectedNeg}(l2))), l2))$	24	18.3785	15.544	19.6685	13.0155	49.864
95	EFF14-95	$\text{pow}(\text{protectedNeg}(l2), \text{sub}(\text{pow}(l3, \text{mul}(\text{protectedNeg}(\text{protectedDiv}(0, l4)), \text{protectedDiv}(l4, l4))), \text{protectedDiv}(l3, \text{protectedDiv}(0, \text{protectedDiv}(\text{pow}(-1, \text{mul}(l2, l3)), l4)))))$	21	15.8065	13.1745	16.772	10.499	47.164
96	EFF14-96	$\text{add}(l3, \text{add}(\text{mul}(\text{protectedDiv}(l4, l4), l2), \text{add}(l2, \text{sub}(l2, \text{protectedDiv}(l4, l4)))))$	21	15.8065	13.1745	16.772	10.499	45.387
97	EFF14-97	$\text{pow}(\text{abs}(l1), -1)$	15	12.033	10.5255	11.218	8.3405	0
98	EFF14-98	$\text{pow}(\text{abs}(l1), \text{protectedNeg}(\text{protectedNeg}(\text{mul}(\text{add}(l1, l1), \text{pow}(l4, l4)))))$	22	16.753	14.0385	18.1185	11.412	0
99	EFF14-99	$\text{add}(\text{protectedDiv}(l3, l4), \text{mul}(\text{add}(\text{protectedDiv}(\text{pow}(\text{add}(l4, l1), \text{pow}(l3, l2)), l4), l1), l1))$	21	15.8065	13.1745	16.772	10.499	36.861
100	EFF14-100	$\text{add}(\text{sub}(\text{add}(l4, l3), \text{add}(\text{add}(\text{sub}(l4, 1), l4), 1)), l4)$	9	7.5615	6.728	6.689	5.9625	0
101	EFF14-101	$\text{add}(\text{abs}(l1), \text{abs}(l2))$	0	0	0	0	0	66.6065

102	EFF14-102	add(protectedDiv(protectedDiv(-1, l2), protectedDiv(abs(l4), l4)), l1)	22	16.425	13.6215	17.504	10.9875	49.864
103	EFF14-103	add(abs(l3), mul(l1, protectedDiv(pow(-1, mul(l2, 1)), l4)))	15	11.106	9.0275	11.656	7.1565	25.039
104	EFF14-104	add(sub(l1, l4), l3)	18	14.532	12.538	11.781	11.013	24.223
105	EFF14-105	pow(l4, protectedNeg(sub(l2, protectedDiv(l4, l1))))	23	17.7045	14.977	18.951	12.6775	32.2685
106	EFF14-106	add(l4, mul(add(sub(0, 1), protectedDiv(l4, l4)), l4))	10	7.127	5.698	7.861	4.563	49.864
107	EFF14-107	add(l4, mul(l3, protectedDiv(abs(l4), l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
108	EFF14-108	add(l1, mul(add(sub(0, 1), protectedDiv(l4, l4)), l4))	17	12.714	10.5645	12.792	8.416	31.5255
109	EFF14-109	add(l1, abs(l2))	20	15.0765	12.5845	16.122	10.129	66.6065
110	EFF14-110	add(l2, mul(l3, pow(sub(l4, l1), l4)))	12	8.846	7.2165	8.5835	5.379	32.157
111	EFF14-111	add(protectedDiv(l3, l4), mul(add(protectedDiv(l3, l4), l1), l1))	11	8.148	6.7015	8.617	5.8425	36.861
112	EFF14-112	add(l2, add(l1, l1))	9	6.732	5.588	7.069	4.834	64.31
113	EFF14-113	add(l1, add(l1, l1))	16	13.032	11.258	10.031	9.793	0
114	EFF14-114	add(l4, protectedDiv(l2, l4))	17	13.0655	11.1355	12.957	8.9635	24.223
115	EFF14-115	pow(l3, protectedDiv(sub(l1, l4), l4))	7	5.14	4.18	5.49	3.71	42.477
116	EFF14-116	pow(protectedNeg(l2), sub(protectedDiv(protectedDiv(l3, protectedDiv(abs(l1), l4)), l4), protectedDiv(l3, add(-1, l2))))	18	14.532	12.538	11.781	11.013	44.114
117	EFF14-117	add(protectedDiv(pow(l3, mul(protectedDiv(0, 0), 0)), sub(l1, mul(l3, abs(l3)))), mul(l3, l2))	17	12.0745	9.6415	12.7635	7.4395	32.429
118	EFF14-118	add(sub(l2, l4), abs(l1))	19	14.5065	12.238	14.8135	9.7425	60.322
119	EFF14-119	add(sub(l1, add(add(add(l4, 1), 1), 1)), l2)	18	14.532	12.538	11.781	11.013	60.322
120	EFF14-120	add(protectedDiv(pow(l3, mul(protectedDiv(0, abs(l3)), 0)), sub(l1, mul(l3, abs(l3)))), mul(l3, l2))	16	13.032	11.258	10.031	9.793	32.429
121	EFF14-121	add(sub(l3, add(add(sub(l4, 1), 1), 1)), mul(l1, protectedDiv(abs(mul(l3, l4)), l4)))	21	15.312	12.575	16.092	9.9485	30.025
122	EFF14-122	add(sub(l1, protectedNeg(protectedDiv(0, l4))), mul(add(l3, 0), add(-1, add(add(sub(l4, 1), l4), 1))))	0	0	0	0	0	49.864
123	EFF14-123	pow(add(sub(l1, sub(l1, l3)), sub(l1, l4)), protectedNeg(sub(abs(mul(l3, l2)), add(l4, 1))))	21	15.8065	13.1745	16.772	10.499	38.946
124	EFF14-124	add(protectedDiv(0, l4), mul(l3, protectedDiv(protectedDiv(l3, protectedDiv(abs(0), l4)), l4)))	12	8.846	7.2165	8.5835	5.379	44.114
125	EFF14-125	add(l4, l1)	18	14.532	12.538	11.781	11.013	56.252



126	EFF14-126	$\text{pow}(\text{protectedNeg}(l2), \text{sub}(-1, \text{protectedDiv}(l3, l1)))$	16	13.032	11.258	10.031	9.793	39.465
127	EFF14-127	$\text{protectedDiv}(l2, l1)$	9	6.312	5.0525	7.113	3.9315	18.52
128	EFF14-128	$\text{pow}(\text{abs}(\text{add}(l2, \text{sub}(l1, \text{add}(\text{add}(\text{add}(l4, l3), 1), 1)))), \text{protectedNeg}(\text{protectedNeg}(l2)))$	13	9.719	8.0385	10.279	6.775	31.5685
129	EFF14-129	$\text{add}(0, \text{protectedDiv}(l1, \text{abs}(l2)))$	18	13.632	11.373	12.1565	9.4245	35.819
130	EFF14-130	$\text{pow}(l3, \text{protectedDiv}(\text{sub}(l1, l4), l4))$	17	13.1535	11.0955	11.8815	9.2565	42.477
131	EFF14-131	$\text{abs}(\text{sub}(l1, l3))$	10	7.127	5.698	7.861	4.563	0
132	EFF14-132	$\text{pow}(\text{protectedDiv}(l1, \text{abs}(l2)), \text{protectedNeg}(\text{sub}(\text{abs}(\text{mul}(l4, l2)), \text{add}(\text{mul}(\text{add}(l3, \text{sub}(l4, l4)), l1), \text{sub}(l1, l1)))))$	12	9.352	7.966	8.306	6.749	41.01
133	EFF14-133	$\text{add}(\text{protectedDiv}(\text{pow}(l3, \text{mul}(\text{protectedDiv}(0, l4), l3)), \text{sub}(l1, l1)), \text{mul}(l3, l2))$	13	9.722	8.074	10.3215	6.35	49.894
134	EFF14-134	$\text{pow}(\text{protectedNeg}(l2), \text{sub}(\text{pow}(l3, \text{mul}(\text{protectedNeg}(\text{protectedDiv}(0, l4)), \text{protectedDiv}(l4, l4))), \text{protectedDiv}(l3, l4)))$	17	13.1535	11.0955	11.8815	9.2565	50.014
135	EFF14-135	$\text{add}(\text{sub}(l3, \text{add}(\text{add}(l3, l4), 1)), \text{mul}(l3, \text{protectedDiv}(\text{abs}(l4), l4)))$	12	8.972	7.466	8.187	6.3655	45.387
136	EFF14-136	$\text{pow}(\text{protectedNeg}(l2), \text{sub}(\text{pow}(\text{protectedNeg}(\text{sub}(l2, \text{protectedDiv}(l4, \text{add}(l4, \text{sub}(l1, l4))))) , \text{mul}(\text{protectedNeg}(\text{protectedDiv}(-1, l4)), l3)), \text{protectedDiv}(l3, \text{add}(-1, l2))))$	0	0	0	0	0	32.2585
137	EFF14-137	$\text{add}(l3, l2)$	28	21.9065	18.8135	23.3275	17.201	72.754
138	EFF14-138	$\text{add}(0, l2)$	14	10.618	8.841	10.844	6.668	24.223
139	EFF14-139	$\text{add}(\text{sub}(\text{protectedNeg}(0), \text{abs}(l4)), \text{mul}(l3, \text{protectedDiv}(\text{abs}(l4), l4)))$	23	17.7045	14.977	18.951	12.6775	45.387
140	EFF14-140	$\text{add}(\text{protectedDiv}(0, \text{sub}(l3, \text{add}(\text{add}(l3, l4), 1))), \text{mul}(\text{sub}(l2, \text{protectedDiv}(l4, l4)), l2))$	12	9.663	8.42	8.677	7.609	49.864
141	EFF14-141	$\text{add}(l1, \text{sub}(\text{protectedDiv}(l3, l2), \text{sub}(-1, 0)))$	0	0	0	0	0	25.249
142	EFF14-142	$\text{add}(\text{sub}(l3, \text{add}(\text{add}(\text{sub}(l4, 1), 1), 1)), \text{mul}(l1, \text{protectedDiv}(l4, l4)))$	15	11.032	8.997	11.4615	7.1345	49.864
143	EFF14-143	$\text{add}(\text{sub}(l1, \text{pow}(l4, l1)), \text{mul}(\text{protectedNeg}(l1), \text{add}(0, l4)))$	28	21.304	18.168	22.588	14.991	33.686
144	EFF14-144	$\text{pow}(l4, \text{protectedNeg}(\text{sub}(l2, \text{protectedDiv}(l4, \text{add}(l4, \text{sub}(l1, l4)))))$	9	6.732	5.588	7.069	4.834	32.2685

145	EFF14-145	add(l1, add(l3, l3))	17	13.1535	11.0955	11.8815	9.2565	0
146	EFF14-146	add(l1, mul(protectedDiv(l4, l4), l4))	16	12.555	10.7135	11.269	9.2565	31.5255
147	EFF14-147	add(protectedDiv(protectedDiv(-1, l2), protectedDiv(abs(mul(l1, protectedDiv(abs(mul(l3, l4)), l4))), l4)), mul(l3, l2))	18	13.414	11.1245	13.682	8.886	49.864
148	EFF14-148	add(sub(protectedNeg(0), abs(l4)), mul(l3, protectedDiv(abs(l4), l4)))	13	9.719	8.0385	10.279	6.775	45.387
149	EFF14-149	pow(protectedNeg(l3), sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), protectedDiv(abs(l4), l4)))	17	12.4145	10.0595	12.3115	6.9165	49.864
150	EFF14-150	add(sub(l1, add(add(sub(l4, 1), l4), 1)), mul(add(l3, 0), add(-1, 0)))	18	14.532	12.538	11.781	11.013	66.6065
151	EFF14-151	add(pow(1, l1), protectedNeg(l2))	18	14.532	12.538	11.781	11.013	25.249
152	EFF14-152	add(protectedDiv(pow(l3, mul(protectedDiv(0, l4), l3)), sub(l1, l1)), mul(l4, l2))	17	12.4425	10.113	12.584	6.9775	49.894
153	EFF14-153	add(sub(l1, l4), add(protectedDiv(l3, l4), l1))	15	11.338	9.421	11.524	7.058	38.959
154	EFF14-154	add(protectedDiv(pow(l3, mul(protectedDiv(l1, l4), 0)), sub(l1, l1)), mul(l3, l2))	17	13.812	11.918	11.021	10.413	49.894
155	EFF14-155	pow(protectedNeg(l2), sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), protectedDiv(l4, l4))), protectedDiv(l3, abs(l1))))	10	7.127	5.698	7.861	4.563	44.9955
156	EFF14-156	add(pow(1, l1), protectedNeg(1))	15	11.106	9.0275	11.656	7.1565	0
157	EFF14-157	add(l4, mul(l1, l4))	18	14.532	12.538	11.781	11.013	23.561
158	EFF14-158	pow(protectedNeg(l2), sub(protectedDiv(protectedDiv(l3, protectedDiv(abs(l2), l4)), pow(l3, mul(protectedNeg(protectedDiv(0, l4)), protectedDiv(l4, l4))), protectedDiv(l3, add(-1, l2))))	23	17.7045	14.977	18.951	12.6775	44.114
159	EFF14-159	pow(protectedNeg(l4), sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), protectedDiv(l4, l4))), protectedDiv(l3, abs(protectedDiv(l3, l4)))))	10	7.127	5.698	7.861	4.563	47.164
160	EFF14-160	pow(abs(add(l2, sub(abs(l1), add(mul(add(l3, protectedDiv(l1, abs(l2))), l1), 1))), protectedNeg(protectedNeg(l2)))	21	15.8065	13.1745	16.772	10.499	41.702

The values of FVe and fitness score of individuals in Generation 15 (on training set)

id	EFF	Experssion	FVe	fitness score				
				FMI	JC	PR	RR	SUMFs
1	EFF15-1	pow(abs(add(l2, sub(abs(l1), add(mul(l4, l1), 1)))), protectedNeg(protectedNeg(l2)))	17	12.4425	10.113	12.584	6.9775	42.117
2	EFF15-2	add(protectedNeg(sub(abs(mul(l3, l2)), add(l4, 1))), protectedDiv(0, l4))	18	14.532	12.538	11.781	11.013	49.864
3	EFF15-3	add(l3, add(l1, add(l3, sub(l2, protectedDiv(l2, l4)))))	14	10.618	8.841	10.844	6.668	36.971
4	EFF15-4	add(l3, add(mul(l3, l2), add(l4, sub(l2, protectedDiv(l2, l4)))))	14	10.618	8.841	10.844	6.668	36.971
5	EFF15-5	add(l3, add(mul(l3, l2), add(l2, l3)))	13	10	8.4985	9.253	7.341	35.0925
6	EFF15-6	add(pow(l1, 0), mul(l3, pow(mul(l3, protectedDiv(abs(l4), l4)), l4)))	17	12.026	9.6105	12.2045	7.3655	41.2065
7	EFF15-7	add(l1, mul(add(sub(add(l1, l4), 1), sub(1, sub(l4, l3))), l4))	13	9.54	7.799	9.984	6.237	33.56
8	EFF15-8	add(-1, add(-1, add(l2, sub(l2, protectedDiv(l4, l4)))))	18	14.532	12.538	11.781	11.013	49.864
9	EFF15-9	add(l1, mul(l3, l4))	15	11.106	9.0275	11.656	7.1565	38.946
10	EFF15-10	pow(abs(add(l2, sub(abs(l1), add(mul(add(l3, protectedDiv(l1, abs(l2))), l1), 1))), protectedNeg(protectedNeg(l2)))	17	12.4145	10.0595	12.3115	6.9165	41.702
11	EFF15-11	add(-1, add(-1, add(l2, sub(mul(l2, l2), protectedDiv(l4, l4)))))	18	14.532	12.538	11.781	11.013	49.864
12	EFF15-12	add(sub(l1, add(sub(l4, 1), 1)), mul(mul(l2, l1), l3))	10	7.5785	6.2935	7.6155	5.506	26.9935
13	EFF15-13	add(sub(protectedNeg(sub(mul(protectedDiv(l1, l3), protectedDiv(l3, l3)), add(mul(add(l3, sub(l4, l4)), l1), 1))), add(sub(l4, 1), 1)), mul(add(sub(l1, sub(l1, l3)), sub(l1, l4)), l3))	19	15.108	13.2145	14.793	11.6225	54.738
14	EFF15-14	add(protectedDiv(1, l4), mul(sub(protectedDiv(0, l4), protectedDiv(l4, l4)), l2))	18	14.532	12.538	11.781	11.013	49.864
15	EFF15-15	add(protectedDiv(0, l3), mul(l3, protectedDiv(protectedDiv(l3, protectedDiv(abs(l2), l4)), l4)))	16	13.032	11.258	10.031	9.793	44.114
16	EFF15-16	pow(protectedDiv(protectedDiv(l3, protectedDiv(abs(l2), l4)), l4), protectedDiv(l1, l4))	13	9.413	7.599	9.24	6.123	32.375
17	EFF15-17	add(pow(1, l1), protectedNeg(l2))	10	7.127	5.698	7.861	4.563	25.249
18	EFF15-18	add(sub(l2, protectedDiv(l4, l4)), protectedDiv(l2, l4))	18	14.532	12.538	11.781	11.013	49.864
19	EFF15-19	pow(l4, protectedNeg(sub(l2, protectedDiv(l4, add(l4, sub(l1, add(mul(add(l3, sub(l4, l4)), l1), 1))))))	9	6.732	5.588	7.069	4.834	24.223

20	EFF15-20	add(sub(l1, add(add(sub(l4, 1), l4), 1)), mul(add(l3, 0), add(-1, l1)))	20	15.047	12.61	15.6365	10.968	54.2615
21	EFF15-21	add(l3, abs(l2))	27	20.4345	17.228	21.5035	13.588	72.754
22	EFF15-22	add(sub(l1, l4), 0)	24	18.3785	15.544	19.6685	13.0155	66.6065
23	EFF15-23	pow(protectedNeg(l3), sub(pow(l3, mul(protectedNeg(abs(0)), l3)), protectedDiv(l3, add(-1, l2))))	13	9.42	7.616	9.705	6.388	33.129
24	EFF15-24	add(sub(l3, l2), l4)	21	15.8065	13.1645	16.912	10.559	56.442
25	EFF15-25	add(add(l3, sub(l2, protectedDiv(l2, l4))), abs(l1))	10	7.127	5.698	7.861	4.563	25.249
26	EFF15-26	pow(protectedDiv(l1, abs(0)), protectedNeg(sub(abs(mul(l3, l2)), add(l4, 1))))	15	11.086	9.1045	11.0625	7.576	38.829
27	EFF15-27	add(sub(l1, protectedNeg(protectedDiv(0, l4))), mul(add(l3, 0), add(-1, protectedDiv(0, l4))))	13	9.471	7.617	9.2285	5.209	31.5255
28	EFF15-28	add(mul(l3, add(l2, sub(l4, l2))), sub(l2, protectedDiv(l4, l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
29	EFF15-29	pow(protectedNeg(l3), sub(pow(l3, mul(1, l3)), protectedDiv(abs(l4), l4)))	22	16.949	14.417	14.843	12.324	58.533
30	EFF15-30	pow(protectedNeg(l2), l1)	14	11.297	9.7815	10.7445	8.6635	40.4865
31	EFF15-31	add(l3, add(mul(0, l2), add(l2, sub(l2, protectedDiv(l4, l4)))))	17	13.1535	11.0955	11.8815	9.2565	45.387
32	EFF15-32	add(l2, protectedNeg(l2))	0	0	0	0	0	0
33	EFF15-33	add(l4, l4)	10	7.127	5.698	7.861	4.563	25.249
34	EFF15-34	add(l3, add(l1, add(add(add(sub(l4, 1), l4), 1), sub(l2, protectedDiv(l4, -1)))))	10	7.127	5.698	7.861	4.563	25.249
35	EFF15-35	add(l1, mul(protectedNeg(l2), l4))	0	0	0	0	0	0
36	EFF15-36	add(l1, mul(l3, protectedDiv(abs(l4), l4)))	18	14.532	12.538	11.781	11.013	49.864
37	EFF15-37	add(sub(l1, l2), protectedDiv(l2, l4))	17	12.0745	9.6415	12.7635	7.4395	41.919
38	EFF15-38	pow(protectedNeg(l3), sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), protectedDiv(l3, add(-1, abs(l4)))))	16	13.032	11.258	10.031	9.793	44.114
39	EFF15-39	pow(protectedDiv(l1, abs(0)), protectedNeg(sub(abs(mul(l3, l2)), add(l4, 1))))	15	11.086	9.1045	11.0625	7.576	38.829
40	EFF15-40	pow(mul(mul(l1, l4), abs(mul(add(sub(l3, l2), 0), add(-1, add(add(sub(l4, 1), l4), 1)))))	14	10.5725	8.803	9.5275	7.7225	36.6255
41	EFF15-41	add(sub(l1, l4), protectedDiv(l2, pow(-1, mul(l2, l3))))	18	13.8285	11.758	14.0935	10.1175	49.7975

42	EFF15-42	add(protectedDiv(1, l4), mul(sub(l2, protectedDiv(l4, l4)), add(l3, sub(l2, protectedDiv(l2, l4)))))	13	9.471	7.617	9.2285	5.209	31.5255
43	EFF15-43	add(sub(l1, l4), add(protectedDiv(l1, l1), sub(l3, mul(l3, protectedDiv(l4, l4)))))	12	9.7515	8.478	8.219	7.6225	34.071
44	EFF15-44	pow(mul(mul(l1, l4), sub(l1, l4)), protectedDiv(l2, l4))	10	7.127	5.698	7.861	4.563	25.249
45	EFF15-45	pow(protectedDiv(l1, abs(0)), protectedNeg(sub(abs(mul(l1, l2)), add(l4, 1))))	15	10.855	8.743	10.6865	7.467	37.7515
46	EFF15-46	pow(protectedDiv(l1, abs(l2)), protectedNeg(sub(abs(mul(l3, l2)), add(mul(add(l3, sub(protectedNeg(add(l2, l2)), l4)), l1), sub(l1, l1)))))	21	15.9095	13.346	17.1155	10.3365	56.7075
47	EFF15-47	add(sub(l1, l4), protectedDiv(protectedDiv(abs(l3), protectedNeg(l3)), l4))	11	7.863	6.328	8.661	5.101	27.953
48	EFF15-48	pow(protectedDiv(l1, abs(l2)), protectedNeg(sub(mul(protectedDiv(l1, l3), protectedDiv(l3, l3)), add(mul(add(l3, sub(l4, l4)), l1), 1))))	24	18.372	15.438	18.307	12.2695	64.3865
49	EFF15-49	pow(protectedNeg(l2), sub(l4, protectedDiv(0, l4)))	18	14.532	12.538	11.781	11.013	49.864
50	EFF15-50	add(l3, mul(l3, pow(mul(l3, protectedDiv(abs(l4), add(-1, l2))), l4)))	15	10.64	8.486	11.243	6.545	36.914
51	EFF15-51	add(protectedDiv(1, l4), mul(sub(l2, protectedDiv(l4, l4)), l3))	13	9.471	7.617	9.2285	5.209	31.5255
52	EFF15-52	add(abs(l3), mul(l1, protectedDiv(pow(-1, mul(l2, 1)), l4)))	10	7.332	5.985	6.512	5.21	25.039
53	EFF15-53	add(l2, mul(l3, pow(sub(l4, l1), l4)))	13	9.265	7.575	9.117	6.2	32.157
54	EFF15-54	pow(l3, protectedDiv(sub(-1, l4), l4))	11	7.863	6.328	8.661	5.101	27.953
55	EFF15-55	add(l3, add(mul(protectedDiv(l4, l4), l2), add(l2, sub(l2, protectedDiv(l4, l4)))))	17	13.1535	11.0955	11.8815	9.2565	45.387
56	EFF15-56	add(protectedDiv(pow(l3, mul(protectedDiv(0, l4), l3)), sub(l1, l1)), mul(l3, add(l3, sub(l4, l2))))	18	14.542	12.538	11.791	11.023	49.894
57	EFF15-57	pow(abs(add(l2, sub(l1, add(add(add(l4, l2), pow(l3, mul(protectedNeg(protectedDiv(0, l4)), protectedDiv(l4, l4))), 1))), protectedNeg(protectedNeg(l2))))	18	14.532	12.538	11.781	11.013	49.864
58	EFF15-58	add(sub(l1, l4), protectedDiv(l2, l4))	17	12.0745	9.6415	12.7635	7.4395	41.919
59	EFF15-59	add(protectedDiv(0, l4), mul(sub(l2, protectedDiv(mul(l3, l4), l4)), l2))	18	14.532	12.538	11.781	11.013	49.864

60	EFF15-60	add(protectedNeg(l2), protectedDiv(0, l4))	18	14.532	12.538	11.781	11.013	49.864
61	EFF15-61	pow(mul(mul(l1, l4), l4), l1)	13	9.5655	7.833	8.9425	6.593	32.934
62	EFF15-62	add(protectedNeg(l3), l1)	0	0	0	0	0	0
63	EFF15-63	pow(mul(l4, l3), add(-1, -1))	17	12.0745	9.6415	12.7635	7.4395	41.919
64	EFF15-64	add(l1, mul(l4, protectedDiv(abs(l4), l4)))	13	9.471	7.617	9.2285	5.209	31.5255
65	EFF15-65	add(protectedDiv(l4, l4), mul(-1, l4))	18	14.532	12.538	11.781	11.013	49.864
66	EFF15-66	add(protectedDiv(pow(l3, mul(protectedDiv(0, 0), 0)), sub(l1, mul(l2, abs(l3)))), mul(l3, l2))	15	10.785	8.675	11.497	6.712	37.669
67	EFF15-67	sub(abs(l1), abs(l4))	24	18.3785	15.544	19.6685	13.0155	66.6065
68	EFF15-68	pow(sub(pow(l3, mul(add(add(add(l4, 1), 1), 1), l3)), protectedDiv(l3, add(-1, l2))), protectedDiv(l1, l4))	19	14.0715	11.544	14.591	8.607	48.8135
69	EFF15-69	pow(mul(mul(l1, l4), sub(l1, l4)), l4)	13	9.316	7.528	10.274	5.777	32.895
70	EFF15-70	pow(protectedNeg(l3), sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), protectedDiv(l3, add(-1, l2))))	12	9.352	7.966	8.306	6.749	32.373
71	EFF15-71	pow(protectedDiv(l1, abs(l2)), protectedNeg(sub(mul(protectedDiv(l1, l3), protectedDiv(l3, l3)), add(mul(add(l3, sub(l1, l4)), l1), 1))))	20	15.281	12.7915	15.2555	10.142	53.47
72	EFF15-72	add(l1, mul(add(sub(sub(protectedNeg(0), abs(l4)), 1), sub(1, sub(l4, l3))), l4))	15	11.106	9.0275	11.656	7.1565	38.946
73	EFF15-73	add(protectedDiv(0, l4), mul(l3, protectedDiv(protectedDiv(l3, protectedDiv(l3, l4)), l4)))	17	13.2235	11.2055	11.7415	9.7065	45.877
74	EFF15-74	add(l2, mul(mul(l1, l4), pow(sub(l4, l1), l4)))	13	10.1995	8.7335	9.6115	7.7035	36.248
75	EFF15-75	add(l1, sub(l2, 0))	24	18.3785	15.544	19.6685	13.0155	66.6065
76	EFF15-76	add(sub(l4, add(sub(l4, 1), 1)), mul(add(sub(l1, sub(l1, l3)), sub(l1, l4)), l3))	22	17.001	14.559	18.3115	12.313	62.1845
77	EFF15-77	add(l4, mul(l3, add(l2, sub(l4, l2))))	14	10.618	8.841	10.844	6.668	36.971
78	EFF15-78	pow(l4, l1)	10	7.356	6.01	6.551	5.226	25.143
79	EFF15-79	add(sub(protectedNeg(l2), pow(l4, l1)), mul(protectedNeg(l1), add(0, l4)))	11	7.92	6.389	8.234	5.027	27.57
80	EFF15-80	add(sub(l3, add(add(l3, l4), l3)), mul(l3, protectedDiv(abs(l4), l4)))	18	14.532	12.538	11.781	11.013	49.864

81	EFF15-81	add(l1, mul(add(sub(0, 1), sub(1, mul(protectedDiv(0, 0), 0))), l4))	0	0	0	0	0	0
82	EFF15-82	pow(abs(add(l2, sub(l1, add(add(add(l4, l2), 1), 1))), protectedNeg(l3))	19	14.247	11.92	14.7055	9.7175	50.59
83	EFF15-83	add(sub(l1, l4), mul(add(l3, 0), add(-1, add(add(sub(l4, 1), l4), 1))))	15	11.106	9.0275	11.656	7.1565	38.946
84	EFF15-84	add(abs(protectedDiv(protectedDiv(l3, protectedDiv(abs(l2), l4)), l4)), mul(l1, protectedDiv(pow(-1, mul(l2, l3)), l4)))	16	13.032	11.258	10.031	9.793	44.114
85	EFF15-85	add(sub(l1, add(sub(l4, 1), 1)), mul(add(sub(l1, protectedDiv(0, l1)), sub(l1, l4)), l3))	21	15.4105	12.803	15.924	11.5815	55.719
86	EFF15-86	add(protectedNeg(l2), abs(l2))	0	0	0	0	0	0
87	EFF15-87	pow(add(sub(l1, sub(l1, l3)), sub(l1, l4)), protectedNeg(sub(abs(abs(l2)), add(l4, 1))))	10	7.127	5.698	7.861	4.563	25.249
88	EFF15-88	add(sub(l1, protectedNeg(protectedDiv(0, l4))), mul(add(l3, 0), add(-1, add(add(sub(l2, 1), l4), 1))))	13	9.471	7.617	9.2285	5.209	31.5255
89	EFF15-89	add(abs(protectedDiv(protectedDiv(l3, protectedDiv(abs(l2), l3)), l4)), mul(l1, protectedDiv(pow(-1, mul(l2, l3)), l4)))	14	10.169	8.26	10.6645	7.5005	36.594
90	EFF15-90	add(l3, mul(l3, l4))	16	11.824	9.7345	11.792	7.576	40.9265
91	EFF15-91	add(sub(l2, l4), l4)	9	6.732	5.588	7.069	4.834	24.223
92	EFF15-92	add(-1, add(-1, add(l2, sub(mul(l2, l2), l1))))	21	16.056	13.7325	16.631	11.972	58.3915
93	EFF15-93	add(protectedDiv(pow(l3, mul(protectedDiv(0, l4), l3)), sub(l1, l1)), mul(l3, add(l2, sub(l4, l2))))	18	14.542	12.538	11.791	11.023	49.894
94	EFF15-94	add(protectedDiv(pow(l3, mul(protectedDiv(0, l4), add(protectedDiv(l3, l4), l1))), sub(l1, l1)), mul(mul(l3, protectedDiv(l1, l4)), l2))	18	14.542	12.538	11.791	11.023	49.894
95	EFF15-95	add(protectedDiv(protectedNeg(l2), protectedDiv(abs(l4), l4)), mul(l3, l2))	18	14.532	12.538	11.781	11.013	49.864
96	EFF15-96	add(sub(l1, l4), mul(sub(l1, add(l3, 0)), sub(l4, l2)))	18	12.931	10.527	13.506	8.226	45.19
97	EFF15-97	add(l4, mul(l3, pow(sub(l4, l1), l4)))	16	11.504	9.282	12.087	7.427	40.3
98	EFF15-98	add(sub(l1, pow(l4, l1)), mul(protectedNeg(l1), add(0, l4)))	13	9.8535	8.2205	8.5755	7.0365	33.686
99	EFF15-99	add(protectedDiv(protectedDiv(-1, l2), protectedDiv(abs(l4), l4)), l1)	18	14.532	12.538	11.781	11.013	49.864

100	EFF15-100	pow(mul(mul(l1, l4), sub(l1, l4)), protectedDiv(l1, l4))	12	8.972	7.466	8.187	6.3655	30.9905
101	EFF15-101	pow(l4, protectedNeg(sub(sub(l2, protectedDiv(l4, add(l4, sub(l1, l4)))), protectedDiv(l4, add(l4, sub(l1, add(mul(add(l3, sub(l4, l4)), l1), 1)))))))	12	8.997	7.4705	9.18	6.621	32.2685
102	EFF15-102	sub(abs(protectedDiv(pow(l3, mul(protectedDiv(l3, l4), 0)), sub(l1, l1))), abs(l4))	18	14.542	12.538	11.791	11.023	49.894
103	EFF15-103	add(protectedNeg(l3), abs(l4))	21	15.8065	13.1745	16.772	10.499	56.252
104	EFF15-104	pow(protectedNeg(l3), sub(pow(l3, mul(sub(l3, l1), l3)), protectedDiv(abs(l4), l4)))	16	12.177	10.19	12.103	9.2285	43.6985
105	EFF15-105	add(l3, add(l1, add(add(l3, 1), sub(l2, protectedDiv(l4, l4))))))	17	13.1535	11.0955	11.8815	9.2565	45.387
106	EFF15-106	pow(l4, protectedNeg(sub(l2, protectedDiv(l4, l1))))	12	8.997	7.4705	9.18	6.621	32.2685
107	EFF15-107	add(l4, abs(l2))	0	0	0	0	0	0
108	EFF15-108	add(protectedDiv(protectedDiv(-1, l2), l3), abs(abs(l3)))	14	10.409	8.5685	10.869	7.415	37.2615
109	EFF15-109	pow(l3, protectedDiv(sub(l1, sub(l4, l4)), l2))	12	8.603	6.941	9.014	5.4105	29.9685
110	EFF15-110	0	0	0	0	0	0	0
111	EFF15-111	add(sub(l1, add(sub(l4, add(l4, sub(l1, l4))), 1)), mul(add(sub(l1, sub(l1, l3)), sub(l1, l4)), l3))	28	21.304	18.168	22.588	14.991	77.051
112	EFF15-112	pow(protectedNeg(l3), sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), protectedDiv(abs(protectedDiv(-1, l2)), l4)))	16	13.032	11.258	10.031	9.793	44.114
113	EFF15-113	add(l3, mul(l3, pow(mul(l3, protectedDiv(abs(l4), l4)), l4)))	16	11.404	9.1245	11.422	7.056	39.0065
114	EFF15-114	pow(l2, protectedDiv(l3, l4))	9	6.742	5.588	7.079	4.834	24.243
115	EFF15-115	add(pow(1, l1), protectedNeg(l2))	10	7.127	5.698	7.861	4.563	25.249
116	EFF15-116	add(protectedDiv(pow(l3, mul(protectedDiv(0, l4), l3)), sub(l1, l1)), mul(l4, l2))	18	14.542	12.538	11.791	11.023	49.894
117	EFF15-117	add(sub(l1, add(add(sub(l4, 1), l4), 1)), l4)	24	18.3785	15.544	19.6685	13.0155	66.6065
118	EFF15-118	add(protectedNeg(l2), sub(l4, protectedDiv(l4, l4)))	18	14.532	12.538	11.781	11.013	49.864
119	EFF15-119	add(sub(protectedNeg(sub(mul(protectedDiv(l1, l3), protectedDiv(l3, l3)), add(mul(add(l4, sub(l4, l4)), l1), 1))), add(sub(l4, 1), 1)), mul(add(sub(l1, sub(l1, l3)), sub(l1, l4)), l3))	21	16.091	13.711	17.3015	11.5005	58.604
120	EFF15-120	add(protectedNeg(0), abs(l2))	9	6.732	5.588	7.069	4.834	24.223



121	EFF15-121	add(protectedDiv(protectedDiv(-1, l2), protectedDiv(abs(mul(l1, protectedDiv(abs(mul(l2, l4))), l4))), l4)), mul(l3, l2))	18	14.532	12.538	11.781	11.013	49.864
122	EFF15-122	add(protectedDiv(protectedDiv(-1, l2), protectedDiv(abs(mul(l1, protectedDiv(abs(mul(l3, l4))), l4))), l4)), mul(l3, l2))	18	14.532	12.538	11.781	11.013	49.864
123	EFF15-123	add(sub(protectedNeg(sub(mul(protectedDiv(pow(protectedNeg(l3), abs(l2)), l3), protectedDiv(l3, l3)), add(mul(add(l3, sub(l4, l4)), l1), 1))), add(sub(l4, 1), 1)), mul(add(sub(l1, sub(l1, l3)), sub(l1, l4)), l3))	20	15.908	13.9245	15.573	12.2725	57.678
124	EFF15-124	add(protectedDiv(pow(l3, abs(mul(l3, l4))), sub(l1, l1)), mul(l4, l2))	0	0	0	0	0	0
125	EFF15-125	add(l4, mul(protectedDiv(l4, l4), l4))	18	14.532	12.538	11.781	11.013	49.864
126	EFF15-126	add(protectedNeg(l2), protectedDiv(l1, l4))	16	11.4455	9.1465	12.1175	7.1615	39.871
127	EFF15-127	add(pow(1, add(protectedDiv(l2, l4), protectedNeg(l4))), protectedNeg(l2))	10	7.127	5.698	7.861	4.563	25.249
128	EFF15-128	pow(protectedDiv(l1, abs(0)), protectedNeg(l4))	15	10.6175	8.462	11.206	6.616	36.9015
129	EFF15-129	add(abs(protectedDiv(l4, l4)), mul(l1, protectedDiv(pow(-1, mul(l2, l3)), l4)))	13	9.471	7.617	9.2285	5.209	31.5255
130	EFF15-130	pow(l3, protectedDiv(sub(pow(abs(l4), pow(l1, l4)), l4), l2))	15	10.8	8.785	11.0965	6.5055	37.187
131	EFF15-131	add(protectedDiv(1, l4), mul(sub(l2, protectedDiv(l4, sub(l1, l1))), l2))	0	0	0	0	0	0
132	EFF15-132	pow(abs(add(l2, sub(l1, add(add(add(l4, l2), 1), 1)))), protectedNeg(protectedNeg(l2)))	18	13.632	11.373	12.1565	9.4245	46.586
133	EFF15-133	add(protectedDiv(pow(l3, mul(protectedDiv(0, l4), l3)), sub(l1, l1)), pow(l3, mul(protectedDiv(0, l4), l3)))	18	14.542	12.538	11.791	11.023	49.894
134	EFF15-134	add(sub(l1, add(add(l4, 1), 1)), mul(add(sub(l1, l3), sub(l1, l4)), l3))	16	12.026	10.0135	12.522	8.332	42.8935
135	EFF15-135	add(sub(abs(l4), l4), 0)	0	0	0	0	0	0
136	EFF15-136	pow(l2, protectedDiv(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), l4))	9	6.732	5.588	7.069	4.834	24.223
137	EFF15-137	pow(l4, protectedNeg(sub(l2, protectedDiv(l4, l1))))	12	8.997	7.4705	9.18	6.621	32.2685

138	EFF15-138	add(sub(protectedNeg(0), abs(l4)), mul(l3, protectedDiv(abs(l4), l4)))	17	13.1535	11.0955	11.8815	9.2565	45.387
139	EFF15-139	add(protectedDiv(protectedDiv(-1, l2), protectedDiv(abs(mul(l1, abs(l2))), l4)), mul(l3, l2))	14	10.444	8.6425	10.989	7.577	37.6525
140	EFF15-140	add(sub(protectedNeg(0), abs(l4)), mul(l2, protectedDiv(abs(l4), l4)))	18	14.532	12.538	11.781	11.013	49.864
141	EFF15-141	add(sub(l1, l4), add(protectedDiv(l3, l4), l1))	16	11.2645	8.9415	11.9435	6.8095	38.959
142	EFF15-142	pow(protectedNeg(l2), sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), protectedDiv(l4, l4))), protectedDiv(l3, l4)))	18	14.582	12.598	11.971	10.863	50.014
143	EFF15-143	pow(l3, protectedDiv(sub(l1, l4), l4))	17	12.1795	9.7575	13.0715	7.4685	42.477
144	EFF15-144	pow(protectedNeg(l3), sub(pow(l3, mul(protectedNeg(protectedDiv(0, l4)), l3)), protectedDiv(abs(l4), l4)))	18	14.532	12.538	11.781	11.013	49.864
145	EFF15-145	pow(abs(add(l2, sub(abs(l1), add(mul(add(l3, protectedDiv(l1, abs(l2))), l1), 1))), mul(add(add(add(l4, 1), 1), 1), l3))	16	12.894	11.185	13.514	9.663	47.256
146	EFF15-146	add(protectedNeg(protectedDiv(0, l4)), protectedDiv(0, l4))	18	14.532	12.538	11.781	11.013	49.864
147	EFF15-147	add(sub(l1, add(add(add(l4, 1), 1), 1)), l2)	22	16.753	14.0385	18.1185	11.412	60.322
148	EFF15-148	pow(abs(add(l2, sub(l1, add(add(add(l4, l3), 1), 1))), protectedNeg(protectedNeg(l4)))	17	12.74	10.5145	13.27	7.4655	43.99
149	EFF15-149	add(sub(0, l4), protectedDiv(l2, l4))	9	6.732	5.588	7.069	4.834	24.223
150	EFF15-150	add(l1, mul(l3, protectedDiv(abs(abs(l3)), l4)))	14	10.7075	9.0395	9.9855	7.7245	37.457
151	EFF15-151	pow(protectedDiv(l4, l4), protectedNeg(sub(l2, protectedDiv(l4, l1))))	18	14.532	12.538	11.781	11.013	49.864
152	EFF15-152	add(protectedDiv(protectedDiv(-1, l2), 1), abs(abs(l3)))	11	8.148	6.7015	8.617	5.8425	29.309
153	EFF15-153	add(l3, add(l1, l4))	10	7.127	5.698	7.861	4.563	25.249
154	EFF15-154	add(protectedDiv(l4, protectedDiv(abs(l4), l3)), mul(l3, l2))	17	13.1535	11.0955	11.8815	9.2565	45.387
155	EFF15-155	pow(l2, protectedDiv(l1, l4))	16	12.555	10.7135	11.269	9.2565	43.794
156	EFF15-156	add(protectedDiv(pow(l3, mul(protectedDiv(0, l4), l3)), sub(l1, l1)), mul(mul(l3, protectedDiv(l1, l4)), l2))	18	14.542	12.538	11.791	11.023	49.894
157	EFF15-157	add(protectedDiv(1, l4), mul(sub(l2, protectedDiv(l4, l4)), l2))	18	14.532	12.538	11.781	11.013	49.864
158	EFF15-158	add(l3, abs(pow(l3, mul(protectedDiv(0, l4), l3))))	17	13.1535	11.0955	11.8915	9.2565	45.397

159	EFF15-159	add(protectedDiv(pow(l3, mul(0, l3)), sub(l1, l1)), mul(l3, l2))	0	0	0	0	0	0
160	EFF15-160	add(sub(protectedNeg(sub(mul(protectedDiv(l1, l3), protectedDiv(l3, l3)), add(mul(add(l3, sub(l4, l4)), l1), 1))), add(sub(l4, 1), 1)), mul(add(sub(l1, sub(l1, l3)), sub(l1, l4)), l3))	19	15.108	13.2145	14.793	11.6225	54.738