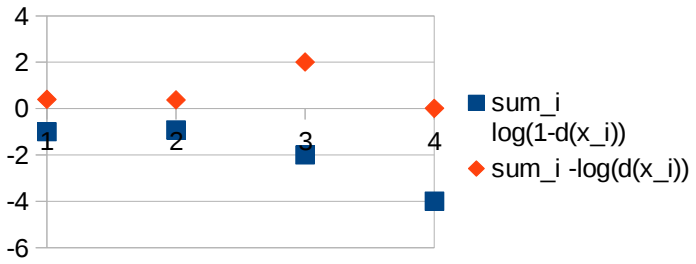
What is the difference if we either

minimize sum_i log(1-d(x_i))
minimize sum_i -log(d(x_i))



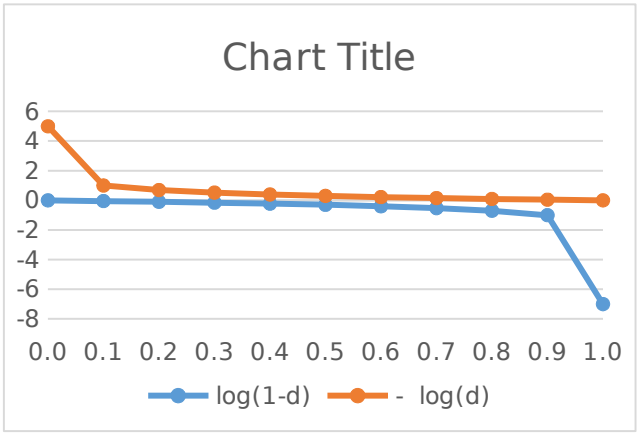
Compare the 2 losses on a small fake batch {x1,x2}

x1	x2	sum_i log(1-d(x_i))	sum_i -log(d(x_i))
0.5	0.8	-1	0.39794
0.6	0.7	-0.92081875	0.3767507
0.01	0.99	-2.00436481	2.0043648
0.99	0.99	-4	0.0087296

Observe:

Blue loves if any D(x_i)~1 "GOOD"

Red hates if any D(x_i)~0 "BAD"



		0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
minimize	log(1-d)	-4.343E-06	-0.0458	-0.09691001	-0.154902	-0.221849	-0.30103	-0.39794	-0.522879	-0.69897	-1	-7
minimize	- log(d)	5	1	0.69897	0.5228787	0.39794	0.30103	0.2218487	0.154902	0.09691	0.045757	4.34E-08