Kurt Michels – Optimization Project Fall 2011

Package	optimizer	function	page
ape	nlminb	dev(p)	ace.R
ape	nlminb	foo	CDF.birth.death.R
ape	nlminb	minusploglik(p[EDGES], p[-EDGES])	chronopl.R
ape	nlminb	minusloglika	SlowinskiGuyer.R
ape	nlminb	half.dev	yule.time.R
diversitree	nlminb	invert(func)	mle.R
ape	nlm	dev(p), minusLogLik, minus.REML.BM(p), dev.BM(p)	ace.R
ape	nlm	dev(0, p)	birthdeath.R
ape	nlm	dev(p)	compar.ou.R
ape	nlm	dev(p)	yule.R
ape	nlm	half.dev	yule.time.R
diversitree	nlm	invert(func)	mle.R
laser	nlm	ddfunc(p[1], p[2])	DDL.R
laser	nlm	ddfunc(p[1], p[2])	DDX.R
laser	nlm	ddfunc(p[1], p[2])	IDDL.R
laser	nlm	ddfunc(p[1], p[2])	IDDX.R
laser	nlm	LF(p[1])	lamda.stem.ml.R
ape	optim	half.dev	yule.time.R
caper	optim	pgls.likelihood	pgls.R
diversitree	optim	func	mle.R
diversitree	optim	f	mle-tgp.R
geiger	optim	foo	fitContinuous.R
geiger	optim	f	fitDiscrete.R
geiger	optim	foo	medusa.R
geiger	optim	foo	rate.estimate.R
laser	optim	mlbd	bd.R
laser	optim	optimLH.BOTHVAR	fitBOTHVAR.R
laser	optim	optimLH.EXVAR	fitEXVAR.R
laser	optim	optimLH.SPVAR	fitSPVAR.R
laser	optim	mlbd	Ibd.R
ouch	optim	ou.lik.fn	hansen.R
paleoTS	optim	logL.GRW	paleo_TS0.4-1.R
phangorn	optim	fn	phylo.R
phytools	optim	likelihood	anc.trend.R
phytools	optim	likelihood	brownie.lite.R
phytools	optim	likelihood	evol.vcv.R
phytools	optim	likelihood	fitDiversityModel.R
phytools	optim	likelihood	phyl.pairedttest.R
picante	optim	pegls	pblm.R
scaleboot	optim	fn1	misc.R
TreePar	optim	dev	bd.ME.optim.R
TreePar	optim	dev	bd.ME.optim.rho.all.R
TreePar	optim	dev	bd.ME.optim.rho.R
TreePar	optim	dev	bd.MEyule.optim.R
TreePar	optim	timetemp	bd.shifts.optim.R

$$\left(\sum_{n=1}^{\infty} 2^{-n} f(x-r_n)\right)^2 \geq \left(2^{-n} f(x-r_n)\right)^2 = 2^{-2n}\frac{1}{x-r_n} \qquad \forall n$$

I get that I can calculate the $\int_0^1 \frac{1}{x-r_n}dx = \ln\frac{|1-r_n|}{|r_n|}$. So what am I doing wrong? I'm supposed to get that g^2 is not integrable on any interval.