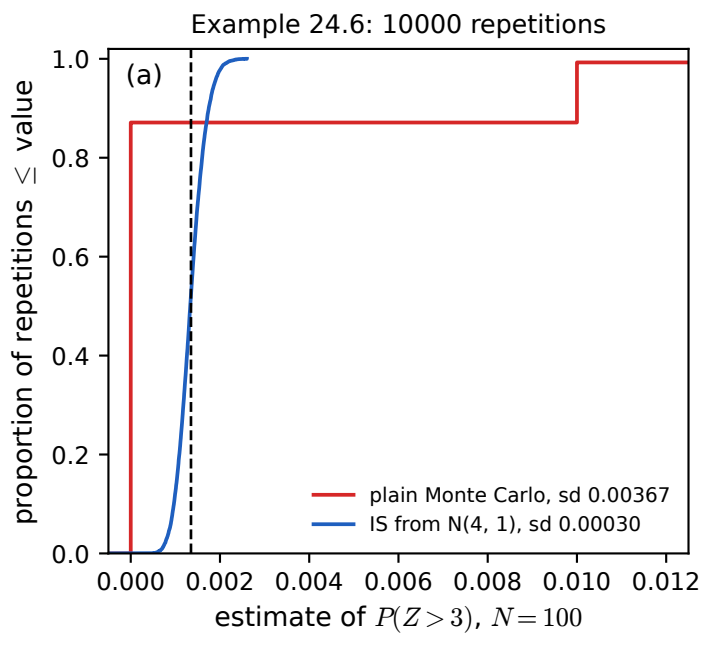
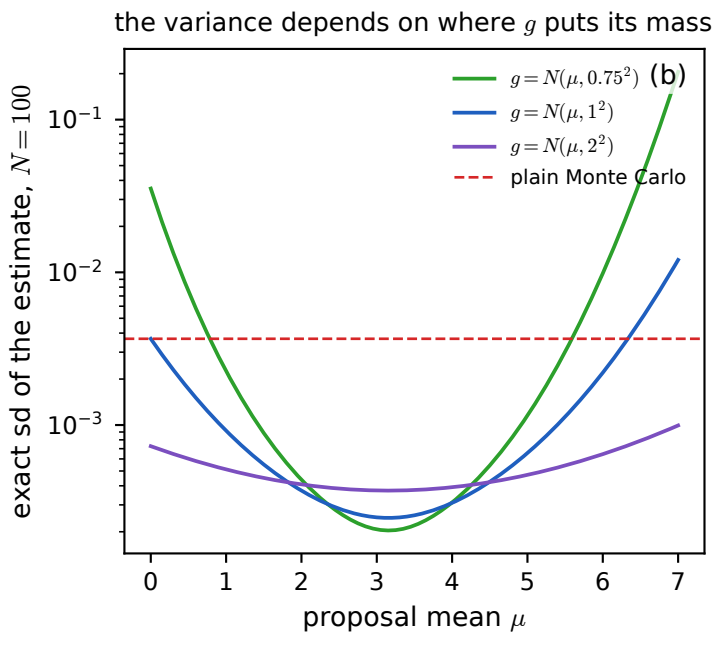
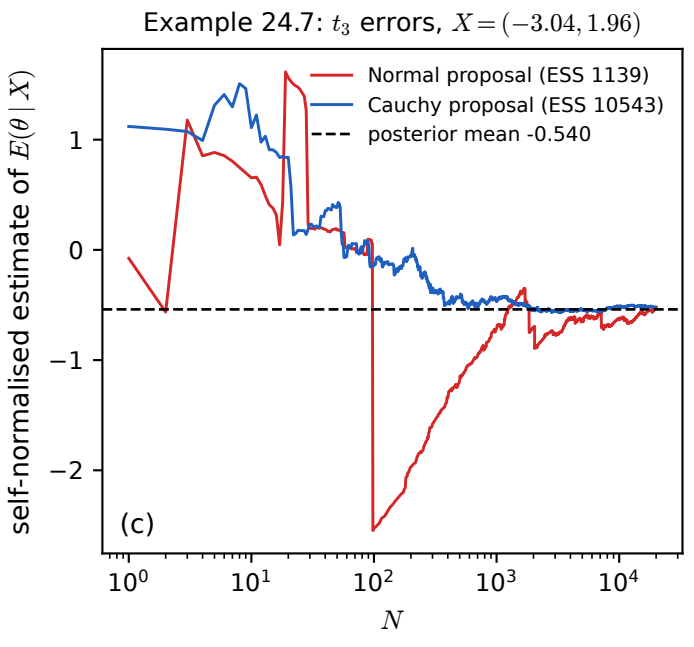

Example 24.6: 10000 repetitions
(a)
proportion of repetitions ≤ value
estimate of $P(Z>3)$, $N=100$
plain Monte Carlo, sd 0.00367
IS from N(4, 1), sd 0.00030


the variance depends on where g puts its mass
(b)
exact sd of the estimate, $N=100$
proposal mean μ
$g=N(\mu,0.75^2)$
$g=N(\mu,1^2)$
$g=N(\mu,2^2)$
plain Monte Carlo


Example 24.7: t_3 errors, $X=(-3.04, 1.96)$
(c)
self-normalised estimate of $E(\theta\,|\,X)$
N
Normal proposal (ESS 1139)
Cauchy proposal (ESS 10543)
posterior mean -0.540