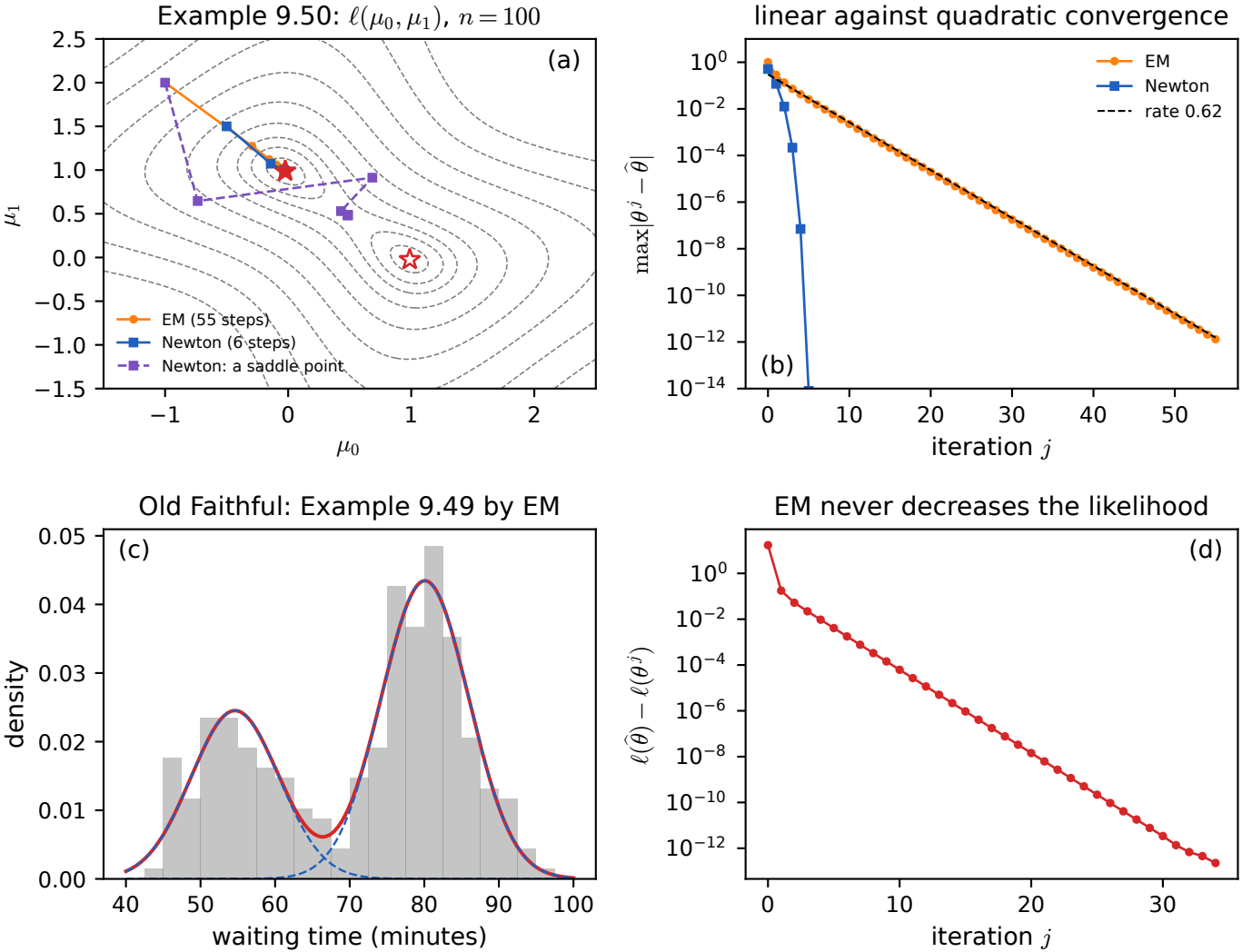

Example 9.50: $\ell(\mu_0, \mu_1)$, $n = 100$
(a)
EM (55 steps)
Newton (6 steps)
Newton: a saddle point
μ_0
μ_1
linear against quadratic convergence
EM
Newton
rate 0.62
(b)
$\max|\theta^j - \hat{\theta}|$
iteration j
Old Faithful: Example 9.49 by EM
(c)
density
waiting time (minutes)
EM never decreases the likelihood
(d)
$\ell(\hat{\theta}) - \ell(\theta^j)$
iteration j