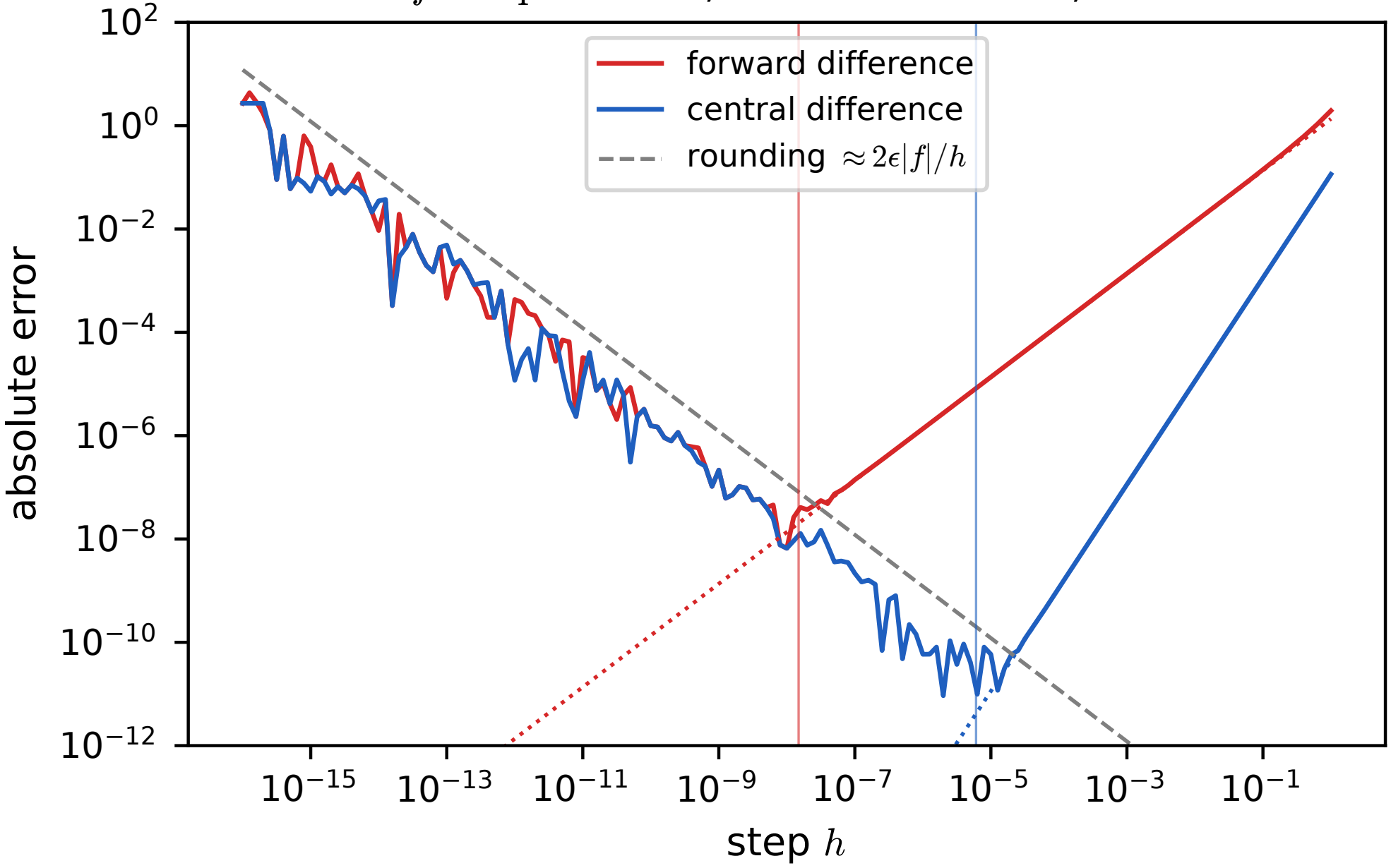

$f = \exp$ at $x = 1$; vertical lines $\epsilon^{1/2}$, $\epsilon^{1/3}$
forward difference
central difference
rounding $\approx 2\epsilon|f|/h$
absolute error
step h
10^{2}
10^{0}
10^{-2}
10^{-4}
10^{-6}
10^{-8}
10^{-10}
10^{-12}
10^{-15}
10^{-13}
10^{-11}
10^{-9}
10^{-7}
10^{-5}
10^{-3}
10^{-1}