

**Algorithm** STEEPEST-DESCENT

Input  $x^0$  initial point

For  $k = 0, 1, \dots$

1. calculate  $d^k = \nabla f(x^k)$
2. find  $\eta^k$  by line minimization
3.  $x^{k+1} \rightarrow x^k - \eta^k d^k$

until stopping condition satisfied

Output  $x^{k+1}$