## (例) $f(x)=2x^2-1$ f'(x)=4x

k	$\mathbf{x}_{k}$	f(x <sub>k</sub> )	f'(x <sub>k</sub> )	$g(x_k) = x_k - f(x_k) / f'(x_k)$	$x_k - g(x_k)$
0	10.00000000	199.00000000	40.00000000	5.02500000	4.97500000
1	5.02500000	49.50125000	20.10000000	2.56225124	2.46274876
2	2.56225124	12.13026287	10.24900498	1.37869607	1.18355517
3	1.37869607	2.80160570	5.51478428	0.87067879	0.50801728
4	0.87067879	0.51616311	3.48271516	0.72247169	0.14820710
5	0.72247169	0.04393069	2.88988676	0.70727017	0.01520153
6	0.70727017	0.00046217	2.82908066	0.70710680	0.00016337
7	0.70710680	0.0000005	2.82842720	0.70710678	0.00000002
8	0.70710678	0.00000000	2.82842712	0.70710678	0.00000000
9	0.70710678	0.00000000	2.82842712	0.70710678	0.00000000
10	0.70710678	0.00000000	2.82842712	0.70710678	0.00000000