	iteration complexity	iteration cost	total
Smooth and strongly convex problems $(\kappa = L/\mu)$			
GD SGD	$\mathcal{O}(\kappa \log(1/arepsilon)) \ \mathcal{O}(1/arepsilon)$	$egin{aligned} \mathcal{O}(n) \ \mathcal{O}(1) \end{aligned}$	$ \begin{array}{ c c } \hline \mathcal{O}(n\kappa\log(1/\varepsilon)) \\ \hline \mathcal{O}(1/\varepsilon) \end{array} $
Nonconvex problems			
GD SGD	$\mathcal{O}(1/arepsilon^2) \ \mathcal{O}(1/arepsilon^4)$	$\mathcal{O}(n)$ $\mathcal{O}(1)$	$\begin{array}{c c} \mathcal{O}(n/\varepsilon^2) \\ \mathcal{O}(1/\varepsilon^4) \end{array}$