$\begin{array}{c} {\rm Quiz\ Problem\ 5} \\ {\rm Due\ Mar.\ 4th,\ 11:59\ pm\ EST} \end{array}$

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Pro	h	lem

Problem. Let $X_n \stackrel{iid}{\sim} f_{\theta}$ where

$$f_{\theta}(x) = \frac{\theta}{(1+x)^{\theta+1}} \text{ for } x > 0.$$

What is the Fisher information $I_N(\theta)$?