Given

$$f(x) = \text{Uniform}(0, \theta)$$

And the ordered statistics

$$X_{(1)} \leq X_{(2)} \leq X_{(3)} \leq \dots \leq X_{(n)} \quad , \quad X_i \sim \text{Uniform}(0, \theta)$$

To Simplify. ~~let~~ Define

$$Y_i = \frac{X_i}{\theta}$$

$$\therefore Y_i \sim \text{Uniform}(0, 1) \quad , \quad X_{(n-13)} = \theta Y_{(n-13)}$$

Now, let a fix $\varepsilon > 0$. Consider

$$Y_{(n-13)} \leq 1 - \varepsilon \qquad [\text{At least } 14 \text{ of } Y_i < 1-\varepsilon]$$

But for one Y_i,

$$P(Y_i \leq 1-\varepsilon) = 1-\varepsilon \qquad \left[P(Y_i \leq 1-\varepsilon) = \int_0^{1-\varepsilon} dx = 1-\varepsilon \right]$$

Since each Y_i has a probability of $1-\varepsilon$ of being below $1-\varepsilon$ and each of them is Independant. We can ~~count~~ define another experiment to count success and failures of being above or below $1-\varepsilon$ which is exactly the ~~bernou~~ binomial experiment.

$\therefore$ Number of samples below $1-\varepsilon$ is:

$$\text{Binomial}(n, 1-\varepsilon)$$

As $n \to \infty$, this expected number is:

$$n(1-\varepsilon) \to \infty$$

$\therefore$ with $P(Y_i) \to 1$, More than 14 samples exceed $1-\varepsilon$.

$$\therefore P(Y_{(n-13)} \leq 1-\varepsilon) \to 0$$

As this holds for all ~~$\varepsilon > 0$~~, $\varepsilon > 0$

$$Y_{(n-13)} \xrightarrow{n \to \infty} 1$$

$$\Rightarrow \boxed{X_{(n-13)} \xrightarrow{n \to \infty} \theta} \quad \blacksquare$$