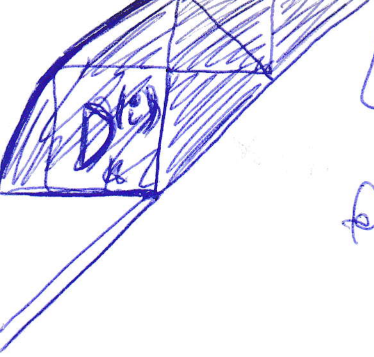

$\boxed{\text{Get Lehmann 1996}}$ & Print ~~Bug~~ the B-Y paper $q_i = \frac{iq}{m}$

for $p \leq p'$, $\mathbb{P}(D \mid P_i = p) \leq \mathbb{P}(D \mid P_i = p')$

$\mathbb{P}(P \in D \mid P_i = p)$

<u>versus:</u> $\mathbb{P}(X \in D \mid X_i = x)$ is non-decreasing in x

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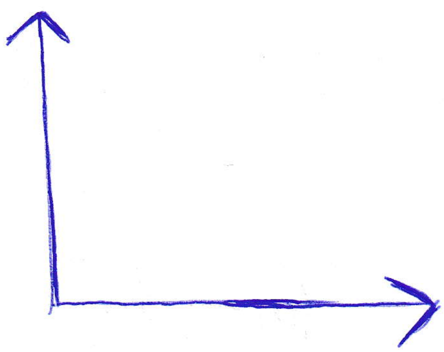

$P_i = 1 - F_{H_i^0}(X_i)$

$F_i(x) = \mathbb{P}(X_i \leq x)$ is $\nearrow$ in x

$\Rightarrow$ P_i is $\searrow$ in X_i

$\mathbb{P}(X \in D \mid X_i = x)$

D & non-decreasing

$\Rightarrow$ $D = \cancel{\{X : X_i \leq x\}} \bigcap_{i=1}^{n} D_i$ where $D_i = \{X_i \geq d_i\}$ or $\{X_i > d_i\}$

using inf arguments.

$\{X_i \geq d_i\} \Leftrightarrow \{F(X_i) \geq F(d_i)\}$ as F increasing.

$\Leftrightarrow \{1 - F(d_i) \geq 1 - F(X_i)\}$.