

$$X_n \uparrow X \implies E(X_n) \uparrow E(X)$$

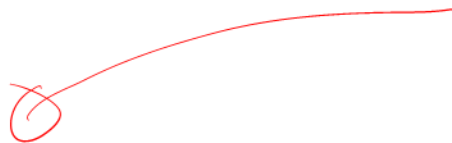
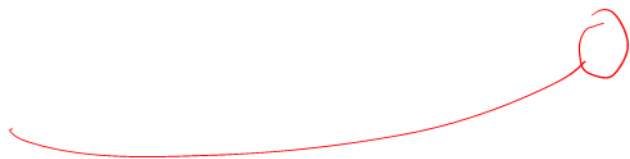
Y has expectation $E(|Y|) < \infty$

$$X_n - Y \uparrow X - Y$$

$$\implies E(X_n - Y) \uparrow E(X - Y)$$



$F(x)$



$F_-(x)$

$$E(X \geq \lambda) \leq \frac{E(X)}{\lambda}$$

$$X^p = E^p \log X$$