1. Suppose \((X_n, \mathcal{F}_n)_{n \geq 0}\) is a (forward) martingale. Let \(Y_{-n} := X_n\) for \(n \geq 0\). Then \((Y_m, \mathcal{F}_m)_{m \leq 0}\) is a reverse martingale. 

2. A predictable martingale always converges.
3. There is a probability \( P \) on \( ([0, 1], \mathcal{B}_{[0,1]}) \) which is neither \textit{absolutely continuous singular} with respect to the \textit{Lebesgue measure} \( \lambda \). \\

4. If \( P \) and \( Q \) are two probabilities on \( (\mathbb{R}, \mathcal{B}_\mathbb{R}) \) which are absolutely continuous with respect to the \textit{Lebesgue measure} \( \lambda \). Then so is the product probability \( P \otimes Q \) with respect to \( \lambda \otimes \lambda \). \\

5. If \( (X_n, F_n) \) is a non-negative martingale with limit \( X_\infty \). Then \( \mathbf{E}[X_n] \to \mathbf{E}[X_\infty] \).