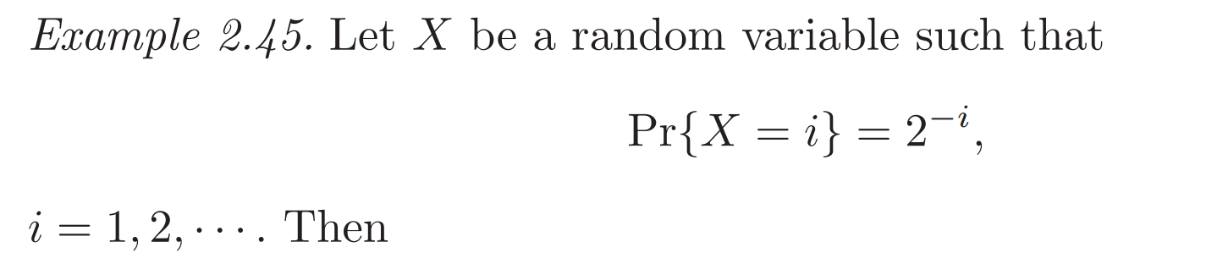
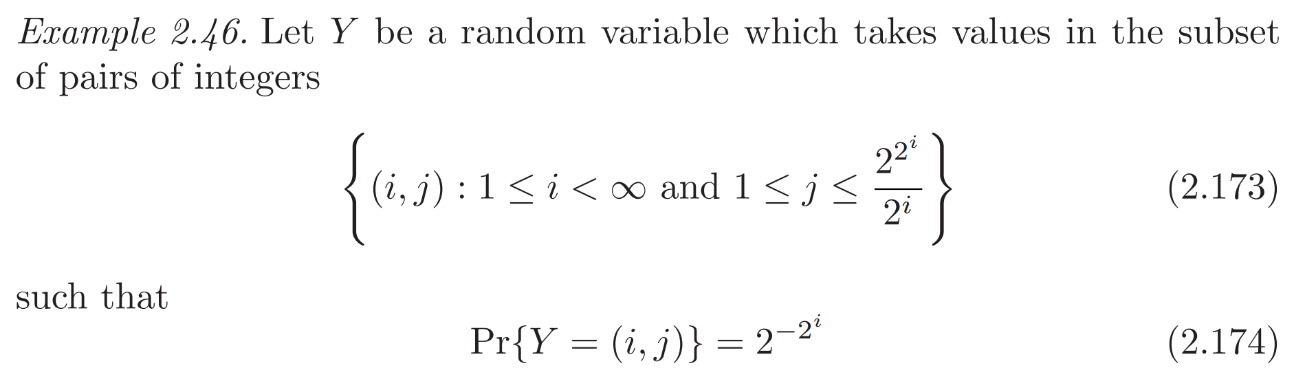
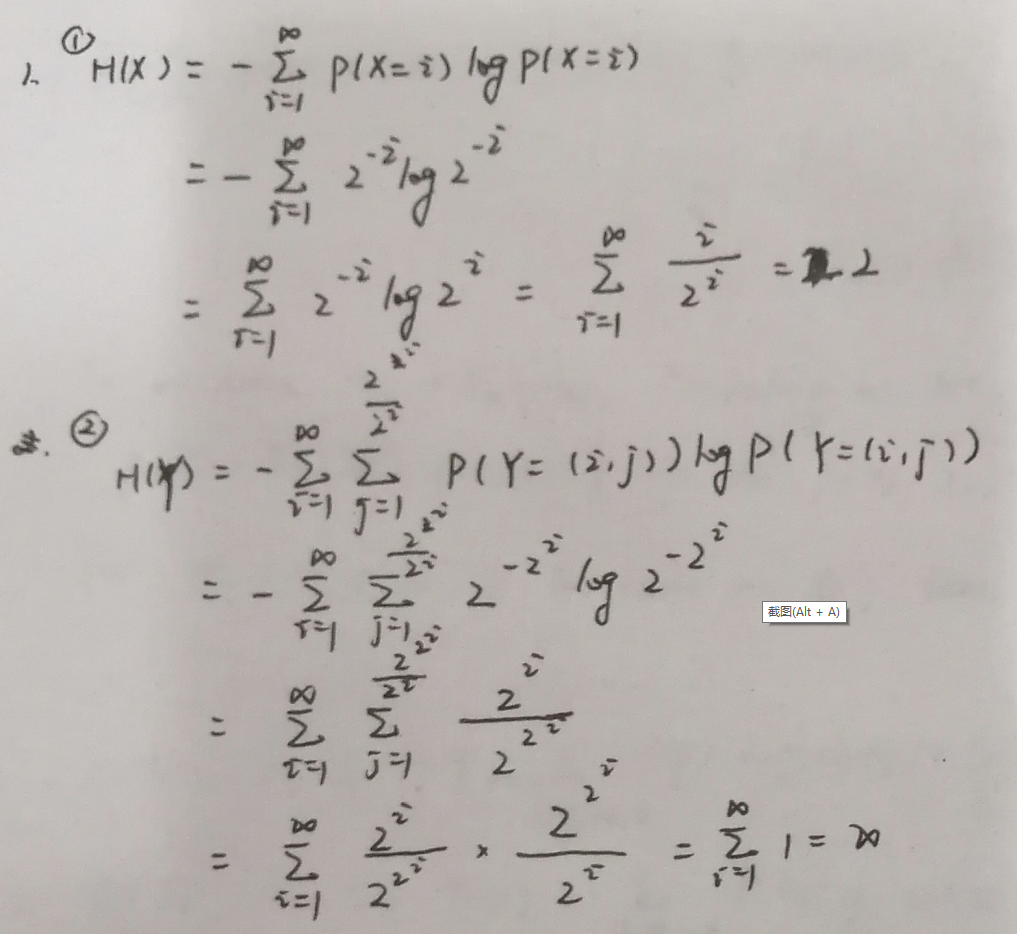
**20200922 Homework**

**1. Calculate the entropy of**

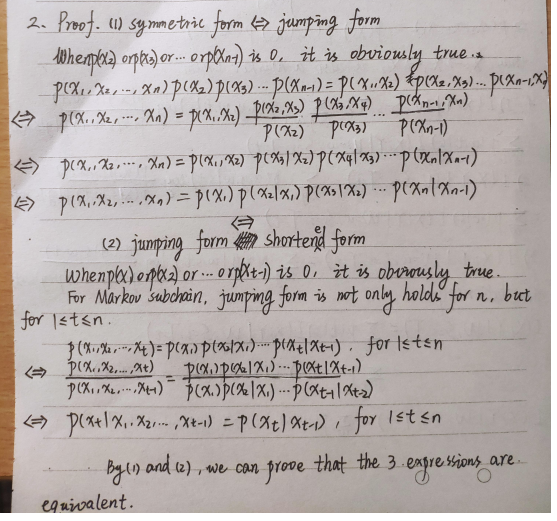


and that of



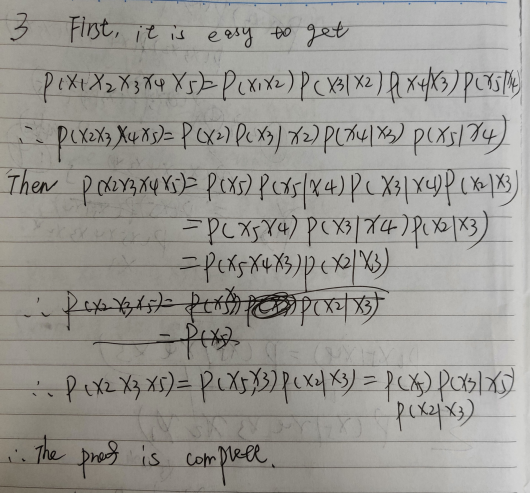


**2. Try to prove the equivalence of three definitions of the Markov chain with *n* nodes.**

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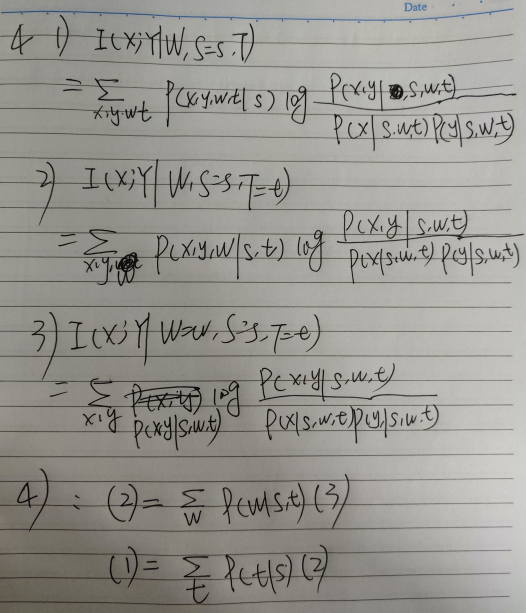
**3. If is a Markov Chain, please show that**

**is also a Markov chain by using the three equivalent definitions only.**

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**4. Present the definitions of**

1. **What are the relationships among the three measurements?**

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