HW\_1 due next Wednesday

1. Watch the Ytube“ Monte Hall Problem”, and summarize it
2. Prove (exercise 1.3)
3. Find the mean and variance
   1. are independent
   2. are independent identically distributed r.v. (i.i.d)
4. Consider a joint probability density function
   1. Find
   2. Find
   3. Find using iterated expectation formular as
5. Let are independent.
   1. Define
6. find and
7. Is a Gaussian? Justify your answer
   1. Define
8. find and
9. Is a Gaussian? Justify your answer
10. Consider a linear stochastic Process

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where , are independent

* 1. Find
* The EnD-