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

1. Find

* The EnD-