Collection of Statistical Illusions

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Here you find some options of interesting problems, paradoxes and fallacies from the fields of probability theory and statistics to choose from. For each illusion, there is a link that directs to a first quick introduction (usually the wikipedia entry). If you have another idea for a nice illusion you want to present, please send me an email.

- Monty Hall problem
- Two children problem
- Bertrand's box paradox
- Two envelopes problem
- St. Petersburg paradox
- Bertrand's stick paradox
- De Méré paradox
- Borel–Kolmogorov paradox
- Ecological fallacy
- Simpson's paradox
- Berkson's paradox
- Hot Hand fallacy fallacy
- Bertrand's factory paradox (look for 'Bertrand paradoxes' in the entry)
- David Hand's mean value problem (see example 2 on slide 10 ff)

Already used previously or otherwise not appropriate to take:

- Gambler's fallacy
- Jeffrey-Lindley paradox
- Sleeping Beauty problem
- Birthday paradox

Other collections of statistical illusions:

- Wikipedia Category: Probability theory paradoxes
- Wikipedia Category: Statistical paradoxes
- https://stats.stackexchange.com/questions/23779/most-interesting-statistical-paradoxes