Note Title 1/28/2011

Step 1 ~

Step 2 ~

In many places, you see

I prefer

⑥

⑦

⑧

Example: 1. The mean $E(X)$ is

2. The variance $Var(X)$ is

3. The first central moment is

* It is very hard to describe and convey the W.A (proof) you are using to others.
⇒ Mathematicians thus give names to some widely used W.As.

For example: ① A R.V X is

② X is a R.V.

1.

For example, ① a fair coin is

② a bent coin is a

③ Winning a lotter is

④ # of touchdowns of Purdue football team is (modeled as)

2.

Q: The score of a baseball team is a binomial R.V with para p, n

$E(X) = ?$ $\quad Var(X) = ?$

Ans:

* Usually (but not necessarily), a binomial distri models the scenario of

Q: The score of a baseball team is a binomial R.V with para p, n

$E(X) = ?$ $\quad Var(X) = ?$

3.

* The geometric R.V. generally models

Q The number of cars in a parking lot is a geometric R.V w. para p.

$E(X) = ?$

Ans: