



ASQ CRE Prep course

Lesson IV. A. 4. b.

Simulation Techniques

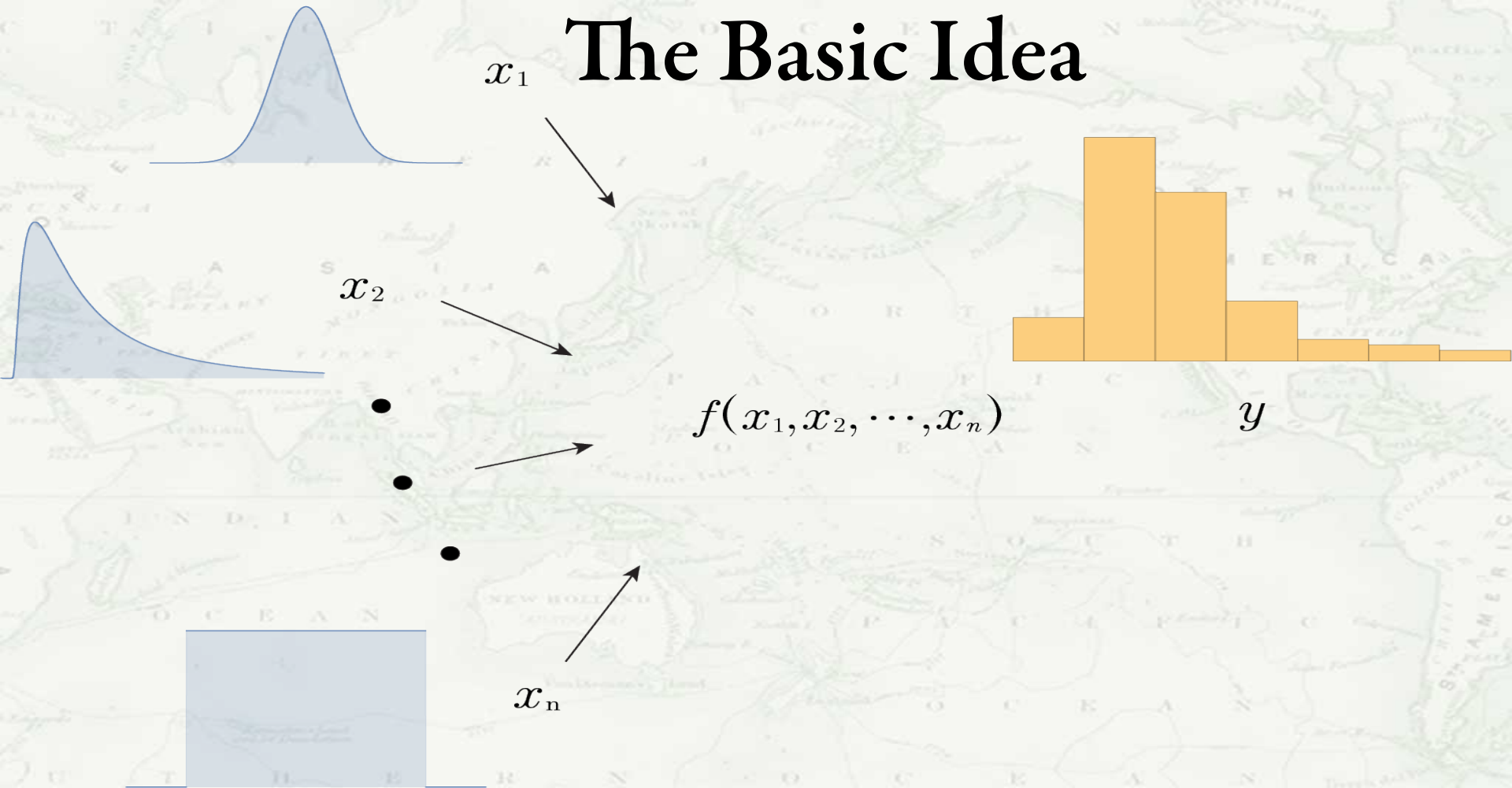
Monte Carlo



Let's run the numbers

COMPUTER & MONTE CARLO SIMULATIONS

The Basic Idea



Run Many Random Samples

Replication	Stress Value	Strength Value	Failure?
1	9.13	12.34	No
2	6.11	31.72	No
3	23.37	21.45	Yes
4	17.22	29.54	No
5	28.92	17.52	Yes
6	12.47	17.23	No
7	23.34	25.49	No
... Continue ...			
N	22.64	29.79	No

We have the
data, let's use it



ASQ CRE Prep course

Lesson IV. A. 5.

Dynamic Reliability