Redundant Array of Inexpensive Disks: RAID 1

- Key idea: arrange the data on the disks so the array can survive failures
- Simplest approach is mirroring, RAID 1
- Halves capacity, but still less expensive than a big disk
- Probability 2 replicas fail is $1-(1-p^2)^{n/2}$
  - If p = 0.001, if n=20, there's a .00001% chance the RAID array will fail each month

Slides from Stanford University, CS110 Principles of Computer Systems