Little's Law

The long-term average number of customers n in a stable system is equal to the long-term average effective arrival rate λ multiplied by the average time a customer spends in the system t.

$$n = \lambda \cdot t$$

Fallacies of Distributed Systems

1. Latency is greater than zero.
2. Bandwidth is less than infinite.
3. Transport cost is greater than zero.
4. There is more than one administrator.
5. Topology does change.
6. The network is not homogeneous.
7. The network is not secure.
8. The network is not reliable.

What is Middleware?

Middleware is software that acts as a bridge between an operating system (or database) and user applications, especially on a network. It also describes software that enables communication and management of data in Distributed Applications. It's the dash in Client-Server or the "-to-" in Peer-to-Peer.