

ratio of cycle time (queue time + service time) divided by service time.
for example:

- queue time: 8 weeks
- service time: 2 weeks
- cycle time = 10
- ratio = $CT/ST = 10/2 = 5$

a ratio of 1 means “no time in queue” because, for example:

$$CT/ST = 2/2 = 1$$

fact: the CT/ST ratio and queue size are related

as the ratio goes up, the queue size goes up

this false graph depicts the thinking mistake that there is little or no time waiting in a queue of a system with variability *until at or near 100% utilization*

myth:

- no wait at 25%
- no wait at 50%
- no wait at 75%

this mistake can lead to bad policy... “You are not yet 100% utilized, so we should give you more work”

