(10) Assume $L = \{a^i b^j c^k \mid i+j \geq k, k \geq 0\}$ is regular w/ pumping number p.

Pick word

$w = a^p b^p c^{2p}$. $w \in L$ & $|w| \geq p$

If we test xyz must be in first p letters, which means y must be an a (or more)

If we pump y down, we get $a^{p-1} b^p c^{2p}$, and $2p \geq p + p - 1$, $2p - 1$,

breaking our assumption..