

(1-4) Look at Δ -Y transforms, or
add a battery to your circuit & see
how it behaves. or build it!

(5) True

(6) Dim slower

(7) False, it progressively brightens

(8) Brighten slower

(9) True

(10) $Q = C \mathcal{E} (1 - e^{-t/RC}) = 2 \cdot 10^{-10} \cdot 5 (1 - e^{-1/10 \cdot 2 \cdot 10^{-10}}) = 10^{-9}$

$\swarrow \sim 6$

(11) $\dot{Q} = -\frac{Q \mathcal{E}}{RC} (e^{-t/RC}) = 0$