|  |  |
| --- | --- |
| **Title** | 8th homework in the Electric Circuit Theory class by 201923250 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Author** | 201923250 | **Date** | 11.1.2020 |

**Summarization**

The theorems of Thevenin and Norton are used on ac circuits in the same manner as they are for dc circuits. The only added effort is that complex numbers need to be manipulated.

The Frequency field ver-Sion of an analogous circuit in Thevenin with an impediment to a linear circuit. Where a linear circuit in parallel with an imped- ance is replaced by a current source. Be mindful that the two identical circuits are connected as well as in the transformation of the source.

VTh's the voltage of open circuits and IN the current of short circuits. If there are various frequency origins in the circuit. Every frequency has to be calculated by the Thevenin or Norton equivalent circuit. This leads to completely separate, similar circuits with equivalent origins and impedances for each frequency and not one equivalent circuit.

I refer to the circuits of op amp, too. As long as the linear area is controlled by the op amp. As always. As always. The secret to study of op amps circuits is to remember two important proper connections of the perfect op amp:

l. No current enters either of its input terminals.

2. The voltage across its input terminals is zero.

