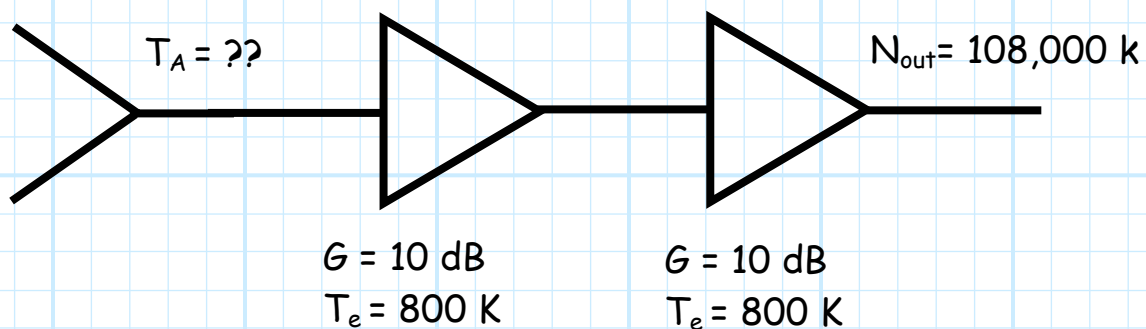


Special Problem 4.C-5

Two **identical** amplifiers are connected as shown below.

Each has a **gain of 10 dB** and an equivalent input **noise temperature of 800 degrees Kelvin**.

The **noise spectral power density at the output** of the second amplifier is **108,000 k** (where **k** is **Boltzman's Constant**).



Determine the **antenna noise temperature T_A** (hint: its **not 290 K !!**).