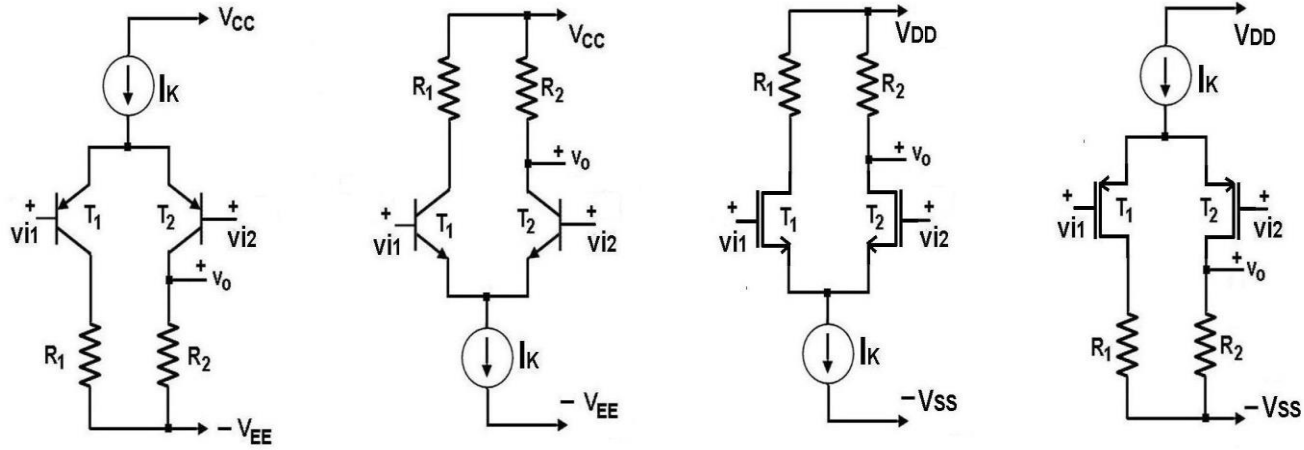
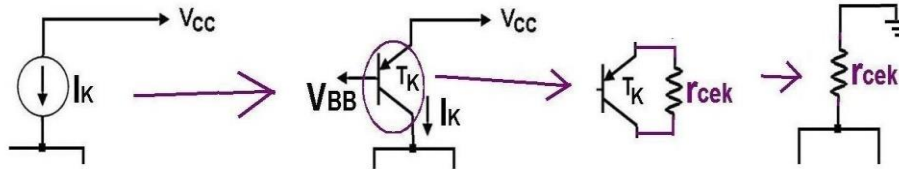


## Fark Kuvvetlendirici-Bağıntılar



$$v_o = \frac{g_{m2} R_2}{2} v_{i1} - \frac{g_{m2} R_2}{2} v_{i2} = \frac{g_{m2} R_2}{2} (v_{i1} - v_{i2}) \quad \longrightarrow \quad \frac{v_o}{(v_{i1} - v_{i2})} = \frac{g_{m2} R_2}{2}$$

**vi1=vi2=vic olursa akım kaynağı modeli daha ayrıntılı olmalı;**



**vi1=vi2=vic**

$$\frac{v_o}{v_{ic}} = \frac{-g_{m2} R_2}{1 + g_{m2} 2r_{cek}} \approx \frac{-R_2}{2r_{cek}}$$

(r<sub>ce</sub>=V<sub>A</sub> / I<sub>CQ</sub>)  
(r<sub>ds</sub>=V<sub>A</sub> / I<sub>DQ</sub>)