$$V_{out} = 30 \text{kV}$$

$$V_{in}$$
= 24V A_{in} = 6.25A P = 150W

$$\mathbf{P} = I^2 \cdot R$$

$$I_{tot} = 30 \text{kV}/200 \text{M}\Omega = 150 \mu \text{A}$$

$$P_1 = P_3$$
= (150 μA)² · 100MΩ = 2.25W

$$P_2 = (150 \,\mu\text{A})^2 \cdot 10 \text{k}\Omega = 225 \,\mu\text{W}$$

$$V_{R1} = 150 \ \mu \text{A} \cdot 100 \text{M} \Omega = 15 \text{V}$$

$$V_{R2}=150~\mu\text{A}\cdot10\text{k}\Omega=1.5\text{V}$$

