1. For the following n-channel JFET circuits calculate $i_D$ and $v_{DS}$ assuming saturation operation in both. (10 points).

2. For the following JFET circuit, given $I_{DSS} = 250 \mu A$ and $V_P = -2V$, calculate $i_D$ and $v_{DS}$ for (a) $R = 100K\Omega$ and (b) $R = 10K\Omega$ (10 points).

3. For the following circuit draw a table showing the various inputs on A and B and the corresponding states of the four transistors as well as the output. (5 points)