A compound gate is shown below.

(a) What region of operation is transistor T1 in when B=C=D=5v. in steady state, and A = 0v.?

B=C=D = 5v, A = 0v
Look at transistor T1. It is on. All other PMOS transistors are off. T2 is off, and all other NMOS transistors are on. In steady state point Z = 0v. point x is falling towards 0, but stops when $V_{gsp} = V_{tpbe} = -1.5v$. It can't drop any further because then T1 would be cutoff, and the current would stop flowing.

$V_{dsp}$ at that point = -1.5 v.

$V_{dsp} < V_{gsp} - V_{thpbe}$ so transistor T1 is in saturation.

(b) What region of operation is transistor T2 in when B=C=D=0v. and A = 5v.?

Use a similar argument to analyze transistor T2.