For the comparator shown below, determine V_{L+} and V_{L-} and then calculate the V_{TL} and V_{TH}. The op amp operates off a single positive supply with $V_{S+} > 8$ V. For the Zener, $V_Z = 5$ V.

Note that the output of the op amp will still saturate high or low at levels near the power supply voltages. All you need to do is determine the two values of v_o (across the Zeners) when the op amp is saturated either high or low. Once you know V_{L+} and V_{L-}, the rest is straight-forward.

$V_{L+} =$ _____

$V_{L-} =$ _____

$V_{TH} =$ _____

$V_{TL} =$ _____