



$$V_{test} = V_{th} + I_{test} R_{th} \quad (\text{By KVL, Ohm's Law})$$

By inspection, it is the case that  $V_{th}$  must be zeroed to find  $R_{th}$  from  $V_{test}/I_{test}$

Since any independent sources in the actual circuit contribute to  $V_{th}$ , all independent sources must be zeroed to find  $R_{th}$  with a test source. using  $R_{th} = V_{test}/I_{test}$