Name:_____
TA: _____
Section:_____

EECS 40/43
Prelab: Device Operating Curves

1. What is the purpose of the differential amplifier in the curve-tracer circuit? **[15 pts]**

2. Briefly explain how the XY mode works on the oscilloscope. **[15 pts]**

3. For the curve-tracer circuit, what DUT current I_{DUT} would correspond to a measured voltage V_R of 50 mV across the resistor in series with the DUT? **[10 pts]**

4. You want to use the curve tracer to verify that a diode (LED) is working properly. Sketch the curve that you would expect to see. Be sure to note the approximate turn-on voltage. **[10 pts]**