Oscilloscope Cheat Sheet

General Guide:

1. The knobs boxed in yellow adjust the scale of the y-axis (the voltage scale). To turn on (or off) fine adjustment, press the knob.
2. The knobs boxed in blue adjust the vertical shift in the y-axis (which shifts the signal up or down).
3. The knob boxed in black adjust the scale of the x-axis (the time scale). To turn on (or off) fine adjustment, press the knob.
4. The knob boxed in red can be used to scroll through the on-screen menu options.
5. The buttons boxed in green are special buttons to be used later in this guide.
Testing the probe cable:

To test if the oscilloscope probe cable works, hook up the ground pin of the probe to the middle bar (circled in black) and probe the metal circled in red. After auto-scaling, the oscilloscope should display a square wave.
Using Cursors:

1. Press the Cursors Button (Circled in red)

2. The following menu will appear on the bottom of the screen:

3. Verify that the source is the correct channel (circled in red on the screen). If the source is the wrong channel, press the button (also circled in red below the screen) until the source is correct. Alternatively, use the knob boxed in red under the general guide to select the correct source.

4. Verify that the cursors is the desired cursor (circled in green on the screen). If the cursor type is the wrong cursor, press the button (also circled in green below the screen) until the cursor is correct. Alternatively, use the knob boxed in red under the general guide to select the correct source.
   a. X cursors measure time
   b. Y cursors measure voltage
Using Trigger

The trigger function of the oscilloscope helps the scope to display the signal without it flickering. The trigger level is a voltage threshold. Every time the signal crosses that threshold, the oscilloscope will display that moment exactly in the middle of the screen. This allow us to view the signal without having it flickering all over the place.

1. Press the trigger button (circled in red)
2. The following menu will appear

3. Verify that the source is the correct channel (circled in red on the screen). If the source is the wrong channel, press the button (also circled in red below the screen) until the source is correct. Alternatively, use the knob boxed in red under the general guide to select the correct source.

4. Use the knob (circled in red in picture below) to adjust the trigger level until the trigger level intersects with the signal and/or the signal stops flickering. Alternatively, use the knob boxed in red under the general guide to select the correct source.
Using the Meas Capability

1. Press the Meas button (circled in red)

2. The following menu will appear

3. Verify that the source is the correct channel (circled in red on the screen). If the source is the wrong channel, press the button (also circled in red below the screen) until the source
is correct. Alternatively, use the knob boxed in red under the general guide to select the correct source.

4. Verify that the type of measurement is correct (circled in green on the screen). If the type of measurement is wrong, press the button (also circled in green below the screen) until the desired measurement type shows up. Alternatively, use the knob boxed in red under the general guide to select the correct source.

5. Once the source and type of measurement is correct, press the button circled in blue to add the measurement.