

PH 7.0

Voltage = 1.52

~~PH = 5.32~~

PH 4.0

Voltage = 2.04

~~PH = 7.14~~

Light sensor - I²C @ 0x10

set gain to 1/8,
integration time to 25 ms
for long run, see slide 257!
also, twist wires!

$$2.04(\text{slope}) + \text{offset} = 4.0$$

$$1.52(\text{slope}) + \text{offset} = 7.0$$

$$\text{offset} = 4.0 - 2.04(\text{slope})$$

$$1.52(\text{slope}) + 4.0 - 2.04(\text{slope}) = 7.0$$

$$2.04(\text{slope}) + (7.0 - 1.52(\text{slope})) = 4.0$$

$$4.0 - 0.52(\text{slope}) = 7$$

$$0.52(\text{slope}) + 7 = 4.0$$

$$-0.52(\text{slope}) = 3$$

$$\text{slope} = -5.7692$$

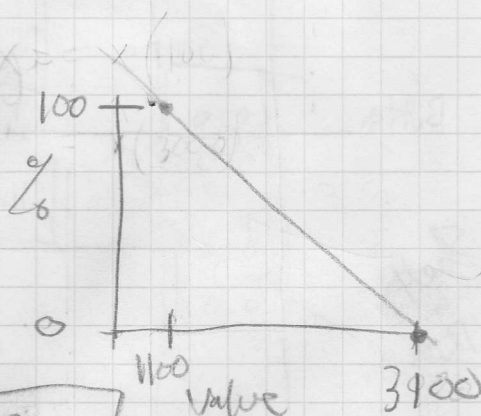
$$\text{slope} = -5.7692$$

$$\text{offset} = 4.0 - 2.04(-5.7692)$$

$$\text{offset} = 7.0 - 1.52(-5.7692)$$

$$\text{offset} = 15.7692$$

Moisture %



$$\% = -\frac{100}{2800}x + b$$

$$100 = -\frac{100}{2800}(1100) + b$$

$$b = 157.895$$

$$\% = \left(-\frac{100}{2800}\right)x + 157.895$$