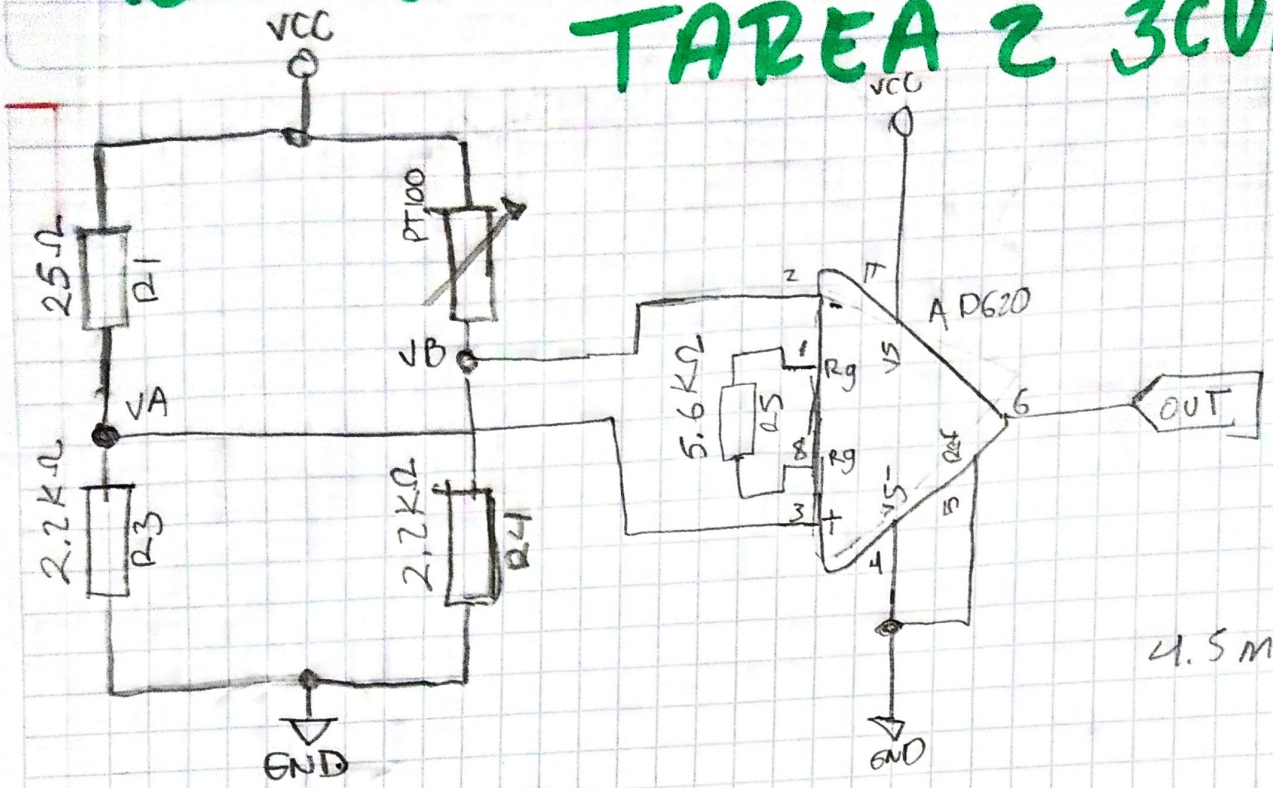
Mora Gurman Jose Antonio
TAREA 2 3CV14



4.5 mV

$RT = 125 + 0.25(T)$

Sensor PT100
$T_o = Lim\,Inf \Rightarrow T_o = 0°C$
$Lim\,Inf = 100\Omega = RT$

$$T = 125 - \frac{RT}{-.25} = 125 \frac{-100}{-.25}$$

$T = 525°C \rightarrow Lim\,Sup$

$$T = \begin{cases} 0°C \rightarrow Lim\,Inf \\ 525°C \rightarrow Lim\,Sup \end{cases}$$

$RT = 100[1 + 0.00385(525)]$

$R2 = RT_{sup} = 302.125\Omega$

$$I = \frac{5V}{R4 + 2S} = 2.2mA$$

$$VA = \frac{1}{\frac{1}{302.125\Omega} + \frac{1}{2.2k}} \times 2.2mA$$

$VA = .584V$

$$VB = \frac{1}{\frac{1}{100} + \frac{1}{2.2k}} \times 2.2mA$$

$VB = 0.21V$

$VABmax = .374V$

$$AV = \frac{V_{sal}}{VABMAX} = \frac{5}{.374}$$

$Av = 13.36V$