

4.16:

$V_{IN}$	Result
0.1	Low
1.2	Low
2.0	Indeterminate
3.5	High
4.5	High

4.14: a) pins D12 & 13

b) pins D8, 9, 10, & 11

c) pins A0 & A1

d) pins D5 & 6

e) the 5V & GND pins

4.8:  $1011 + 0010 = 1101$

$00011101 + 01001111 = 01101100$

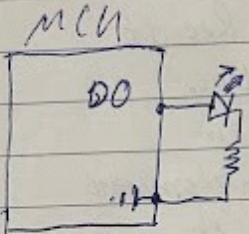
$\begin{array}{r} 1010 \\ - 0011 \\ \hline 0111 \end{array}$

$00101001 - 00010101 = 00010100$

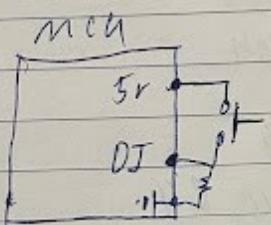
$\begin{array}{r} 00101001 \\ - 00010101 \\ \hline 00010100 \end{array}$



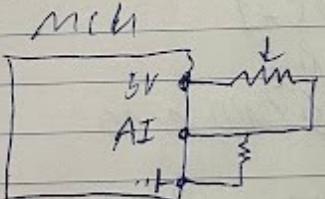
4.19  
a)



b)



c)



4.18 ✓MCU

