

## ADC-DAC: resultados

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1. - a)  $n = 7$  bits  
b)  $\Delta v = 39,37\text{mV}$   
c)  $b = 1011010$
  
2. - a)  $1 \text{ LSB} \rightarrow v_a = 0,1\text{V}$   
b)  $R_1 = 200\text{k}\Omega; R_2 = 100\text{k}\Omega; R_3 = 50\text{k}\Omega; R_4 = 25\text{k}\Omega; R_5 = 12,5\text{k}\Omega; R_F = 8\text{k}\Omega$   
c)  $b = 100001 \rightarrow I = 412,5\mu\text{A}$
  
3. - a)  $I_7 = 1\text{mA}; I_0 = 7,8125\mu\text{A}$   
b)  $1 \text{ LSB} \rightarrow v_O = 39\text{mV}$   
c)  $b = 01000010 \rightarrow v_O = 2,578125\text{V}$
  
4. - a)  $1\text{mS}$  ; b)  $34\mu\text{s}$
  
5. - 5 comparadores ;  $b = 101$
  
6. -  $b = 110000$  ; tempo de conversão =  $n+1 \text{ clocks} = 7\mu\text{s}$