Quiz 12

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Special Topics: Electrical Engineering for Computer Scientists
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1. If $x[n] = \delta[n] + 2 \cdot \delta[n - 1] + 2 \cdot \delta[n - 2]$ and $h[n] = \delta[n] + \delta[n - 1]$, sketch $x[n] \ast h[n]$.

2. Answer the following two
   
   a. A digitizer samples an analog signal using 8 discrete voltage levels for each sample, how many bits per sample does the ADC have?

   b. Fast changing signals are considered to have higher or lower frequency content? Explain your answer.

   a. $2^3 = 8$

   b. higher content

   high changing rate = high frequency