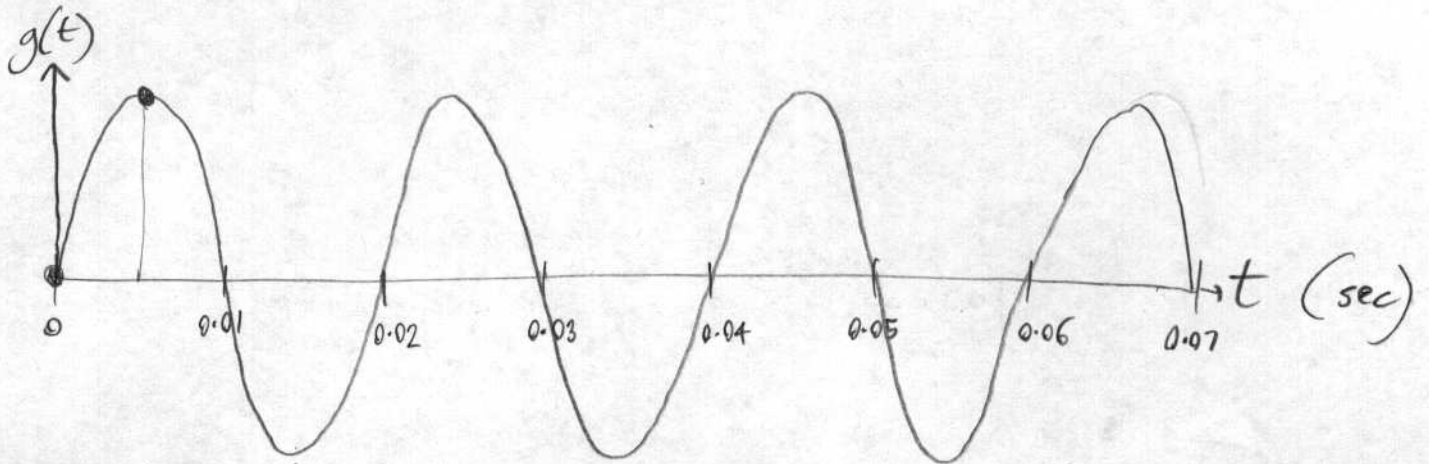


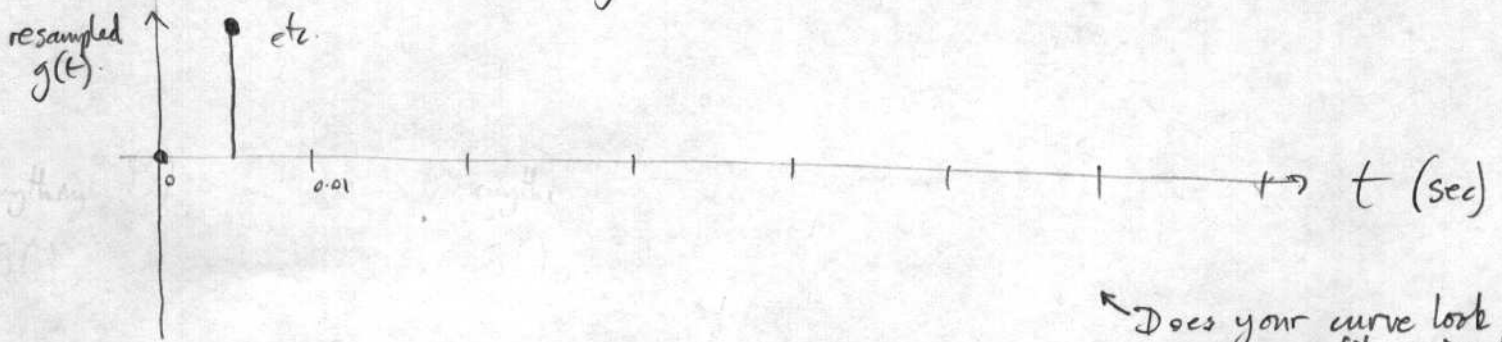
MATH 5 WORKSHEET = Digital sampling

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Here's a sinusoidal signal of frequency 50 Hz

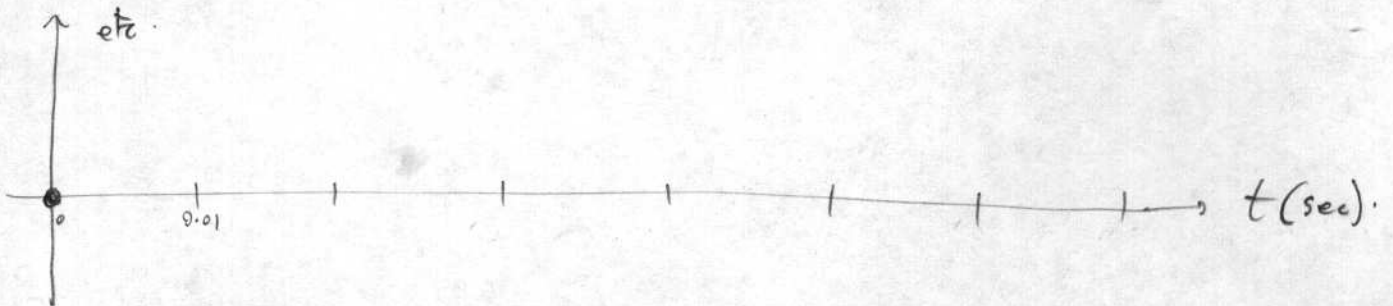


Draw samples (spikes) every 0.005 s ($f_s = 200$ Hz), then connect them with a smooth curve



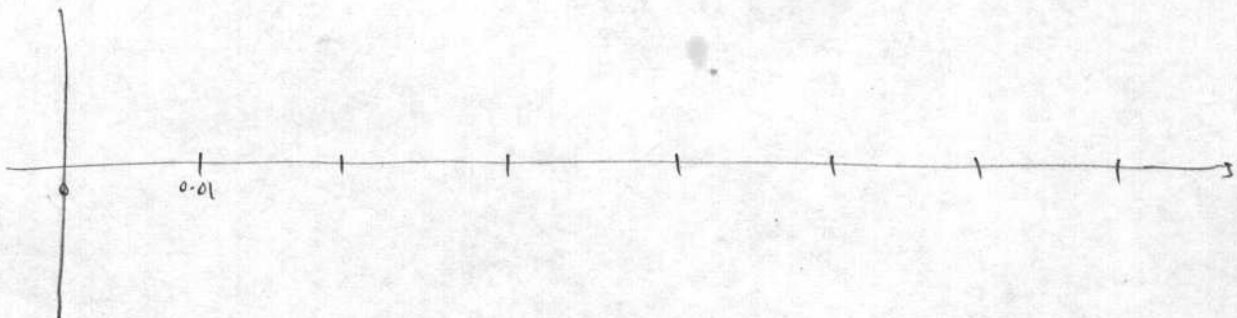
Does your curve look like original?

Do the same but every 0.01 s ($f_s = ?$)



Does your curve look like original?

Do the same but every 0.15 s ($f_s = ?$)

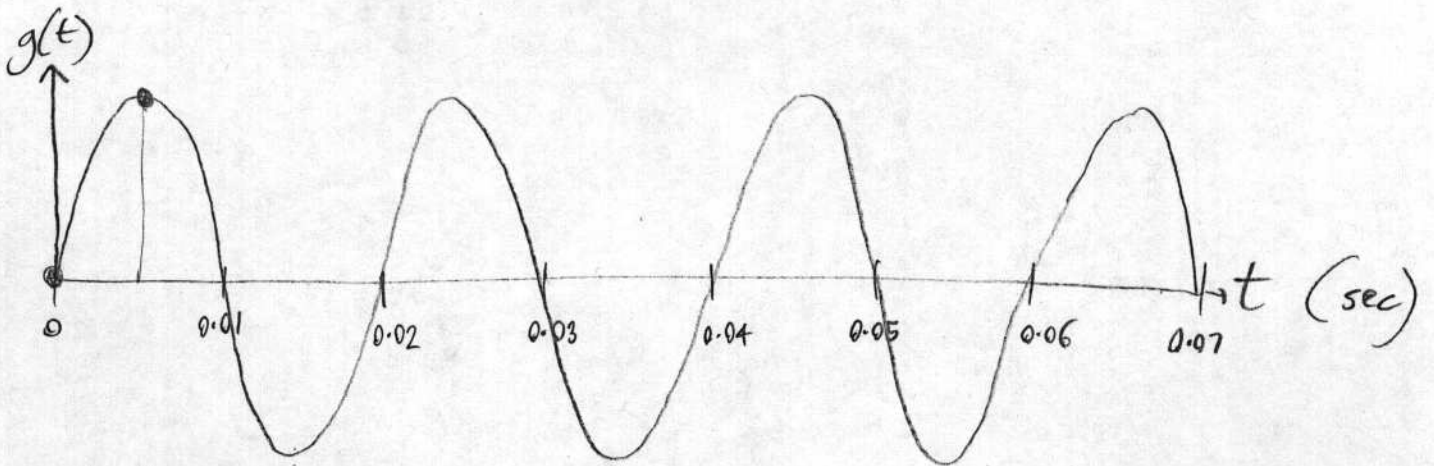


How does your curve relate to original? At least what f_s is needed to recover signal?

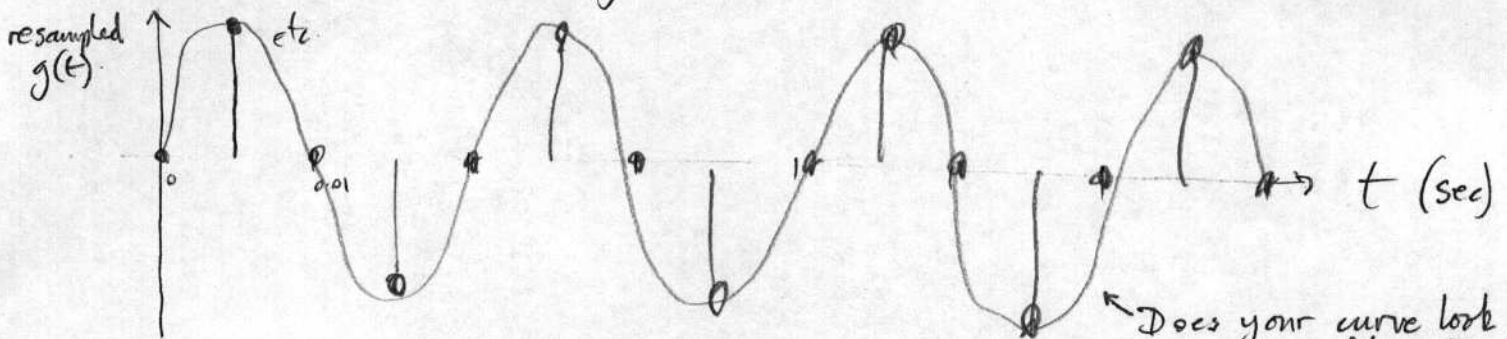
MATH 5 WORKSHEET : Digital sampling

5/29/07
Barnett

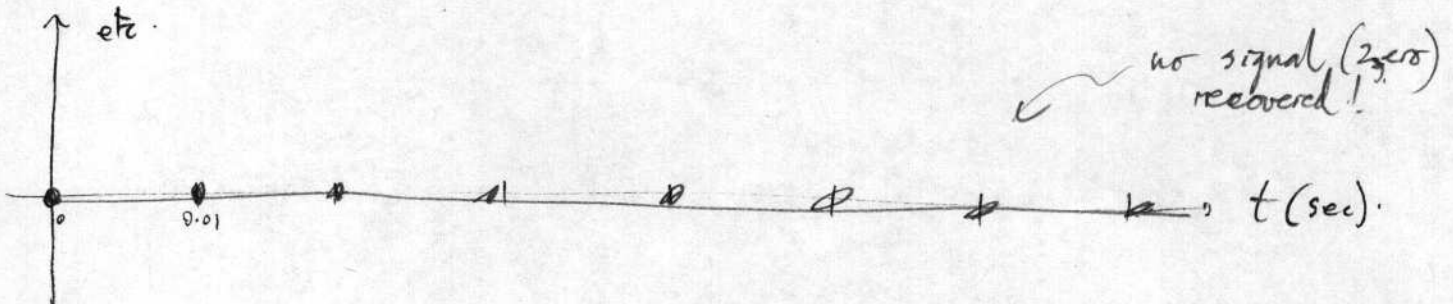
Here's a sinusoidal signal of frequency 50 Hz



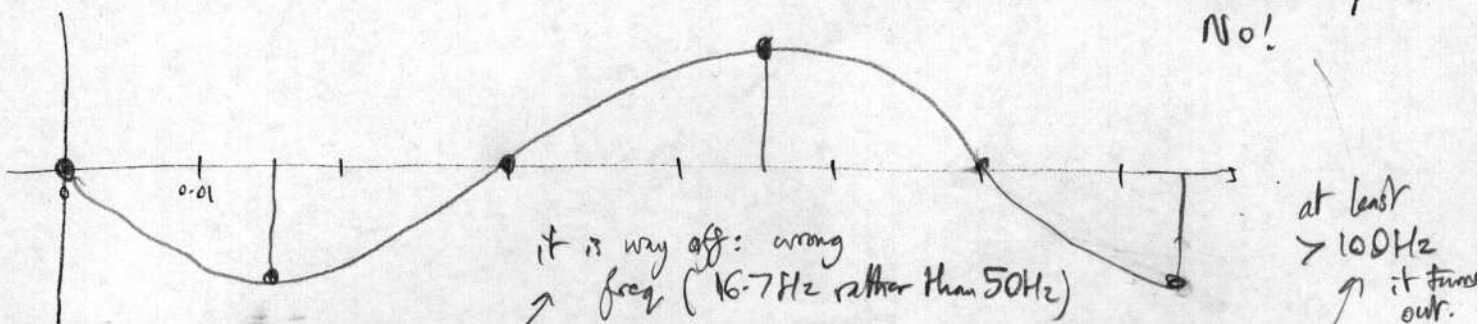
Draw samples (spikes) every 0.005 s ($f_s = 200$ Hz), then connect them with a smooth curve



Do the same but every 0.01 s ($f_s = ?$ 100 Hz)



Do the same but every 0.15 s: ($f_s = ?$ 6.67 Hz)



How does your curve relate to original? At least what f_s is needed to recover signal?