1. Consider a system where the DAC is updated every 4us (250 kHz) with a value from a 200-element wave table containing a single cycle of a waveform. What would be the frequency of the output wave?

- $250000/200 = 1.25\,kHz$

2. Consider that the ADC in 12-bit mode divides the input voltage range (0-3V) into 4096 steps (where 0V is 0, and 3V is 4095).

• What is the voltage/measurement resolution (how much does the voltage change per bit) of the ADC?

- $3/4095 = 0.73260mV$

• What would be the ADC output value (nearest integer) if the input voltage was 1.75V?

$1.75V/0.00073242188V = 2389$