Quiz #5

| **Due** Apr 12 at 9:53am | **Points** 100 | **Questions** 4 | **Available** Apr 12 at 9:35am - Apr 12 at 9:55am 20 minutes | **Time Limit** 12 Minutes |

This quiz was locked Apr 12 at 9:55am.

Attempt History

	Attempt	**Time**	**Score**
LATEST	**Attempt 1**	12 minutes	20 out of 100

Score for this quiz: **20** out of 100
Submitted Apr 12 at 9:47am
This attempt took 12 minutes.

Question 1   0 / 20 pts

A 9-bit digital accelerometer is used to measure acclearition in the range $\pm$2g.

What is the maximum error in [g] ?

Please use at least 4 digits of precision.

You Answered

> 7.828

Correct Answers   0.0078 (with margin: 0.0001)

Question 2   0 / 30 pts

MSP430 controller with power supply Vcc=+3V uses a 12-bit AD converter with positive reference Vr+ = 2.5V.

If you measure an internal signal that is one half of the Vcc voltage what integer value will you read from your AD converter?
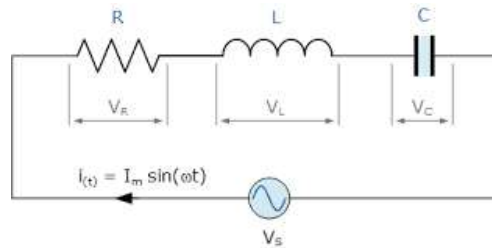
You Answered

> 24.42

Correct Answers   2,457 (with margin: 1)

Question 3   0 / 30 pts

A series of resistor, capacitor, and inductor is used as a filter, with output of the circuit taken from inductor.

What kind of filter does this circuit represent?

○ Low Pass filter

○ All Pass filter

Correct Answer   ○ High Pass filter

○ Band Stop filter

You Answered

◉ Band Pass filter

Question 4   **20 / 20 pts**

Maximum frequency of the ECG signal is 50 Hz.

What is the minimum sampling frequency for this signal?

Correct!

100

Correct Answers   100 (with margin: 0)

Quiz Score: **20** out of 100