Name: Group: GM, DM School year: Date of measurement:

Report

Topic: Electrocardiography I

Exercise:

- a) Monitor and record an ECG from 12 leads of your schoolmate.
- b) For the instantaneous values of potential in QRS complex check the validity of following relations: $U_{II} = U_I + U_{III}$ ($U_I = U_L - U_R$, $U_{II} = U_F - U_R$, $U_{III} = U_F - U_L$).
- c) Construct and evaluate the mean electrical axis of the QRS complex.

Instrumentation: electrocardiograph ECG Praktik, ECG gel. **Procedure:** According to the manual.

Measured and calculated values:

	Q [mV]	R [mV]	S [mV]	U [mV]
Ι				
II				
III				

Sensitivity:

$\mathbf{U}_{\mathrm{I}} = \mathbf{U}_{\mathrm{Q}_{\mathrm{I}}} + \mathbf{U}_{\mathrm{R}_{\mathrm{I}}} + \mathbf{U}_{\mathrm{S}_{\mathrm{I}}} = \mathbf{[mV]}$	$U_I = U$	$\mathbf{U}_{\mathbf{Q}_{\mathrm{I}}} + \mathbf{U}_{\mathbf{R}_{\mathrm{I}}}$	$+U_{S_{I}} =$	[mV]
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$$U_{II} = U_{Q_{II}} + U_{R_{II}} + U_{S_{II}} =$$
[mV]

$$U_{III} = U_{Q_{III}} + U_{R_{III}} + U_{S_{III}} =$$
[mV]

 $U_{II} =$

[mV]

 $\mathbf{U}_{\mathbf{I}} + \mathbf{U}_{\mathbf{III}} = [\mathbf{mV}]$

Construction of the mean electrical axis of QRS complex (graph paper).

Read from the table of ECG: **QRS**= Einthoven's read from a triangle: **QRS**=

Conclusions and commentary: