

Student 1 – name and surname Student 2 – name and surname Group Date/time Table

**Worksheet
Laboratory 2 rev 7.1**

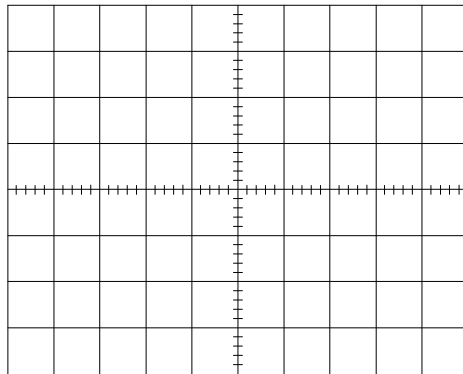
1. Measurement of the distortions for sinusoidal signal

Frequency	0.5kHz	10kHz
THD [%]		
THD [dB]		

Explanation:

2. Measurement of the distortions for different signals

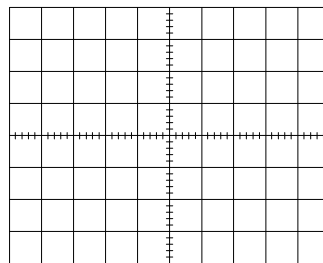
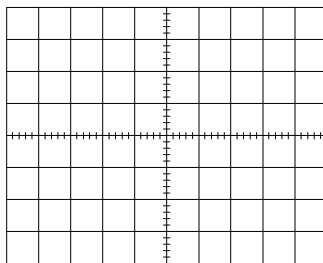
Signal	Sinusoidal	Rectangular	Triangular
THD [%]			
THD [dB]			



Explanations:

Y output for rectangular signal.

3. Visualising the spectra of the previously measured signals (directly from the generator!)



Sinusoidal signal

Rectangular signal

	Fanda mental level [dB]	Noise level [dB]	Fundamen tal frequency [KHz]	Harmonics level		
				f = <i>harmonic no.</i> k =	f = <i>harmonic no.</i> k =	f = <i>harmonic no.</i> k =
Sinusoidal signal				-	-	-
Rectangular signal		-				

Explanations:

4. *Measuring the variation of the distortion factor when varying the level of the signal*

Signal level [dB]	0	-20	-40
THD [%]			
THD [dB]			
Measured level for the fundamental [dB]			
Measured level for the noise [dB]			

Explanations:

5. **Measuring the distortions of a distributed-load amplifier**

a) Computed values: $V_B =$ $V_E =$
 Measured : $V_B =$ $V_E =$

b) $V_{out} =$ $V_{in} =$ $A =$
 Explanation V_C :

c)

signal:	input	Undistorted output	Distorted signal (top or bottom)
THD [%]			

6. *The notch filter parameters*

Remark: fill in the A_{min} (left and right) values in dB !

Attenuation [dB]	-3	-10	-20	-30	-40	$A_{min} =$	$A_{min} =$	-40	-30	-20	-10	-3
Freccq. [Hz]						$F_{low} =$	$F_{high} =$					

