

Numpoint of points must be a power of 2

Sampled signal = SIN(2*PI()* Num/8)

FFT in complex format

IMABS(FFT.complex)

Sampled signal = COS(4*2*PI()*F8/ 8)

FFT in complex format

Sampled signal = 1+COS(1*2*PI()*K8/ 8)

FFT in complex format

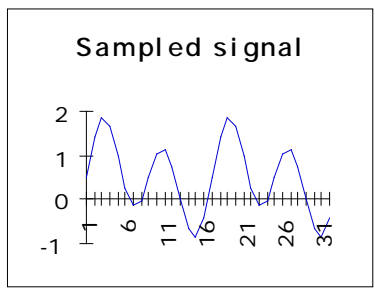
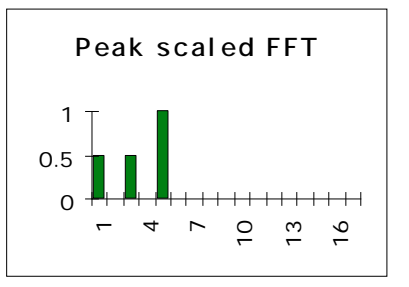
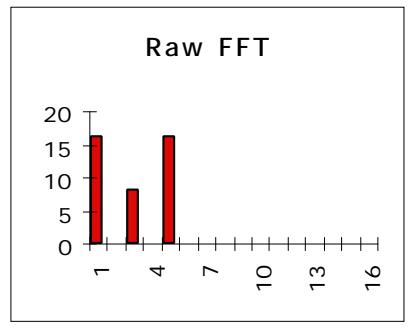
0	0	0	0	dc	0	1	0	dc	0	2	8	dc
1	0.71	-4i	4		1	-1	0		1	1.71	4	
2	-1	0	0		2	1	0		2	1	0	
3	0.71	0	0		3	-1	0		3	0.29	0	
4	0	0	0	nyq	4	1	8	nyq	4	0	0	nyq
5	-0.7	0	0		5	-1	0		5	0.29	0	
6	-1	0	0		6	1	0		6	1	0	
7	-0.7	4i	4		7	-1	0		7	1.71	4	

Signal = 0.5 + 1 * SIN(2*PI()*A20/ 8) + 0.5 * SIN(2*PI()*A20/ 16)

	FFT	raw	Peak_scale	RMS_scale_AC	RMS_scale_AC		
0	0.5	16	16	0.5	dc	0	0.5
1	1.4	0	0	0	0	0	0
2	1.85	-8i	8	0.5	0.354	0.35	0.35
3	1.67	0	0	0	0	0	0
4	1	-16i	16	1	0.707	0.71	0.71
5	0.25	0	0	0	0	0	0
6	-0.1	0	0	0	0	0	0
7	-0	0	0	0	0	0	0
8	0.5	0	0	0	0	0	0
9	1.02	0	0	0	0	0	0
10	1.15	0	0	0	0	0	0
11	0.75	0	0	0	0	0	0
12	0	0	0	0	0	0	0
13	-0.7	0	0	0	0	0	0
14	-0.9	0	0	0	0	0	0
15	-0.4	0	0	0	0	0	0
16	0.5	0	0	0	nyq	0	0
17	1.4	0	0	0	0	0	0
18	1.85	0	0	0	0	0	0
19	1.67	0	0	0	0	0	0
20	1	0	0	0	0	0	0
21	0.25	0	0	0	0	0	0
22	-0.1	0	0	0	0	0	0
23	-0	0	0	0	0	0	0
24	0.5	0	0	0	0	0	0
25	1.02	0	0	0	0	0	0
26	1.15	0	0	0	0	0	0
27	0.75	0	0	0	0	0	0
28	0	16i	16	0	0	0	0
29	-0.7	0	0	0	0	0	0
30	-0.9	8i	8	0	0	0	0
31	-0.4	0	0	0	0	0	0

RMS_AC 0.791

RMS 0.9



How to do FFT in Excel

needsample signal to be a power of 2

select fourier from Analysis tool under options

pick input array and first point output

need to gain scale

DRS 12-1-93

Standard Dev 0.79

RMS 0.935