day	temp °C
4/1/2008	11
4/2/2008	10
4/3/2008	10
4/4/2008	9
4/5/2008	8
4/6/2008	7
4/7/2008	8
4/8/2008	9
4/9/2008	4
4/10/2008	9
4/11/2008	8
4/12/2008	7
4/13/2008	8
4/14/2008	9
4/15/2008	12
4/16/2008	13
4/17/2008	15
4/18/2008	11
4/19/2008	12
4/20/2008	10
4/21/2008	9
4/22/2008	8
4/23/2008	9
4/24/2008	11
4/25/2008	10
4/26/2008	9
4/27/2008	6
4/28/2008	6
4/29/2008	7
4/30/2008	12

with EXCEL functions

N=		´=count
average month temperature=		´=average
minimum=		´=min
maximum=		´=max
range=		´=max - =min
modus=		´=mode
median=		´=median
sample variance=		´=var
sample standard deviation=		´=stdev

"manually" with math formulas in EXCEL

AVERAGE (MEAN)

$$\overline{x} = \frac{\sum_{i=1}^{N} X_i}{N}$$

VARIANCE (sample)

$$s^2 = \frac{\sum_{i=1}^{n}(X_i - \overline{X})^2}{n-1}$$

sample standard deviation

$$s = \sqrt{s^2}$$

body weight

men	women
82	57
87	62
93	58
74	71
68	49
81	56
80	60
67	53
104	71
69	64
75	58
71	49
81	68
96	61
89	54
79	57
109	60
87	47
63	58
75	61
77	67
64	54
59	47
81	64
70	76
69	63
86	67
80	52
81	
91	

	men	women
count		
arit. average		
max		
min		
modus		
median		
variance (population)		
variance (sample)		
stand. dev. (population)		
stand. dev. (sample)		
N		
min		
0.25 percentile		
0.5 percentile		
0.75 percentile		
max		

histogram

length in inches 2.54

conversion (cm)		
0.4	1.016	count
0.33	0.8382	average
1.37	3.4798	max
0.68	1.7272	min
0.61	1.5494	modus
0.06	0.1524	**median**
1.76	4.4704	variance (population)
0.75	1.905	variance (sample)
1.91	4.8514	stand. dev. (population)
0.72	1.8288	stand. dev. (sample)
0.79	2.0066	
1.28	3.2512	0.9 percentile
0.6	1.524	0.5 percentile
0.14	0.3556	0.1 percentile
0.02	0.0508	
1.2	3.048	
1.37	3.4798	
0.27	0.6858	
1.27	3.2258	
1.01	2.5654	
0.22	0.5588	
0.72	1.8288	
1.37	3.4798	
0.22	0.5588	
0.52	1.3208	
0.09	0.2286	
1.7	4.318	
0.83	2.1082	
0.25	0.635	
1.41	3.5814	
0.23	0.5842	
0.14	0.3556	

Fagus sylvatica

frequency	class
5	0.5
6	1
2	1.5
6	2
2	2.5
1	3
6	3.5
1	4
2	4.5
1	5
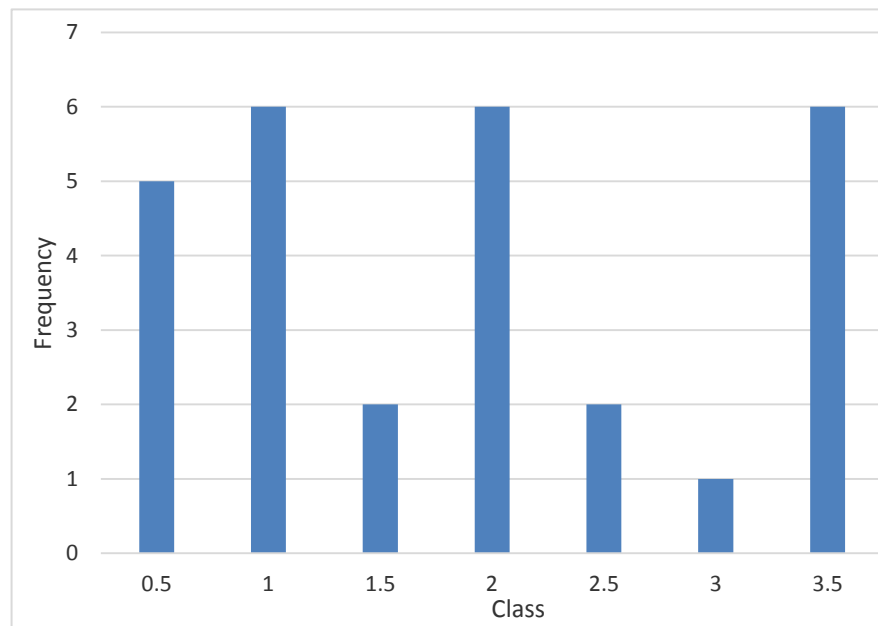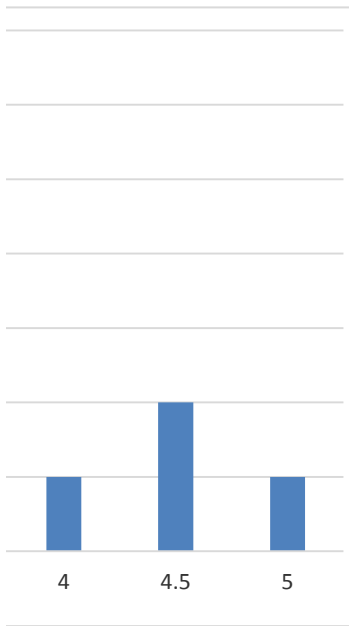
X	Y=x*x		X	Y=sin(x)
1	1		0	0
2	4		0.3	0.29552
3	9		0.6	0.564642
4	16		0.9	0.783327
5	25		1.2	
6	36			
7	49			
8	64			
9	81			
10	100			
11	121			
12	144			
13	169			
14	196			
15	225			
16	256			
17	289			
18	324			

Y=x*x
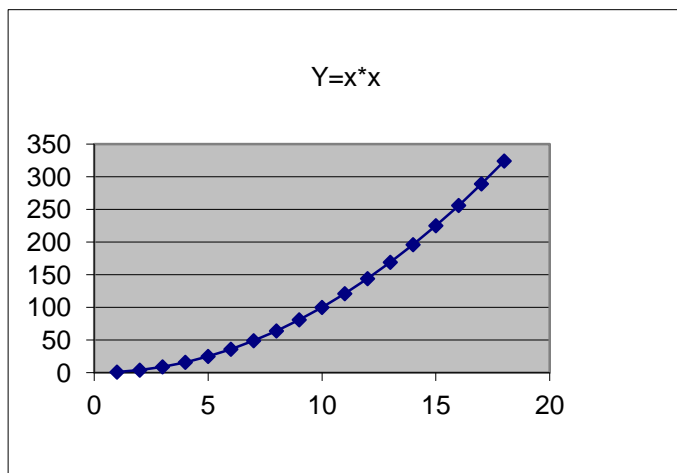
Gaussian function

show normal probability distribution N(2,9)
using Excel function   =norm.dist()