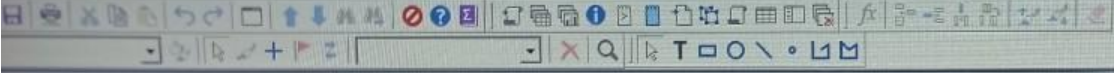
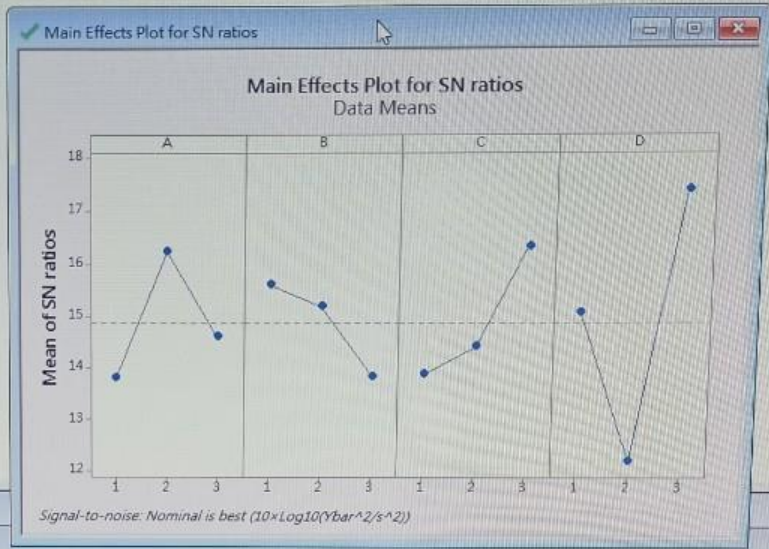
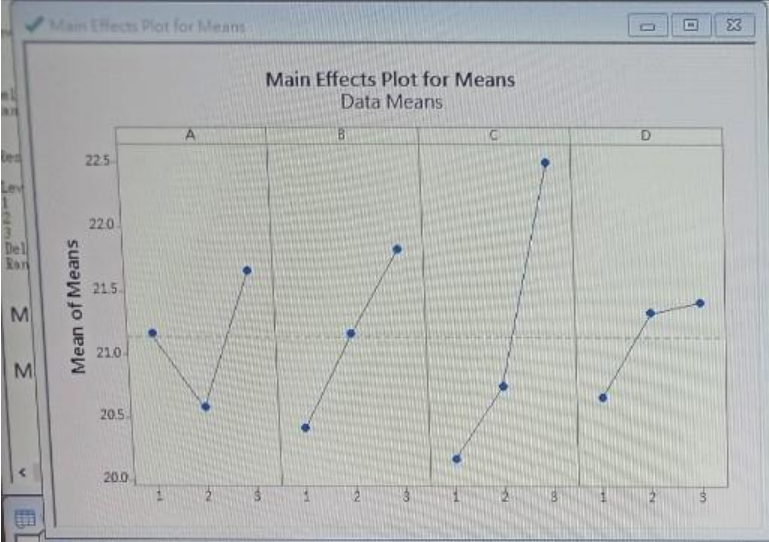


# 學生Minitab軟體練習



Session



Worksheet 2\*\*\*

	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	C17	C18	C19	C20	C21
	A	B	C	D																	
1	1	1	1	1	14	18	21	23													
2	1	2	2	2	16	22	17	29													
3	1	3	3	3	27	19	25	23													
4	2	1	2	3	17	22	21	19													
5	2	2	3	1	24	21	18	23													
6	2	3	1	2	21	13	26	22													
7	3	1	3	2	27	25	17	21													
8	3	2	1	3	19	22	25	18													
9	3	3	2	1	15	23	22	26													
10																					
11																					
12																					
13																					
14																					
15																					
16																					

Current Worksheet: Worksheet 2







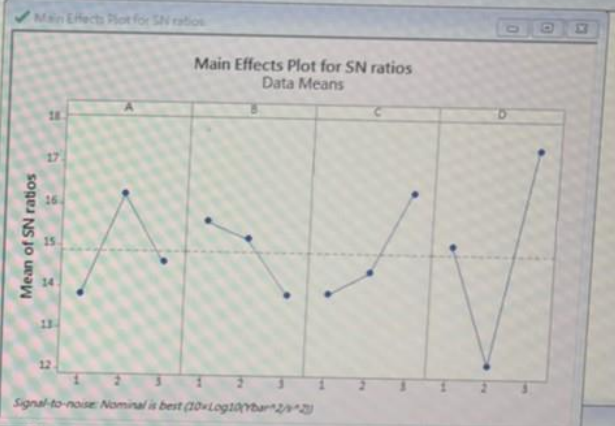
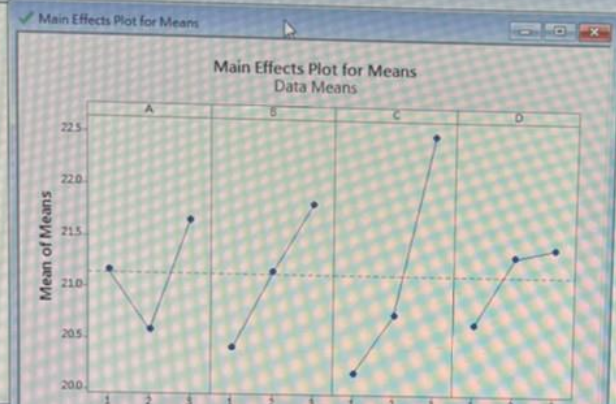


Level	A	B	C	D
1	13.81	15.61	13.89	15.07
2	16.23	15.20	14.42	12.19
3	14.61	13.85	16.35	17.40
Delta	2.42	1.75	2.46	5.20
Rank	3	4	2	1

Response Table for Means

Level	A	B	C	D
1	21.17	20.42	20.17	20.67
2	20.50	21.17	20.75	21.33
3	21.67	21.83	22.50	21.42
Delta	1.00	1.42	2.33	0.75
Rank	3	2	1	4

Main Effects Plot for Means  
 Main Effects Plot for SN ratios

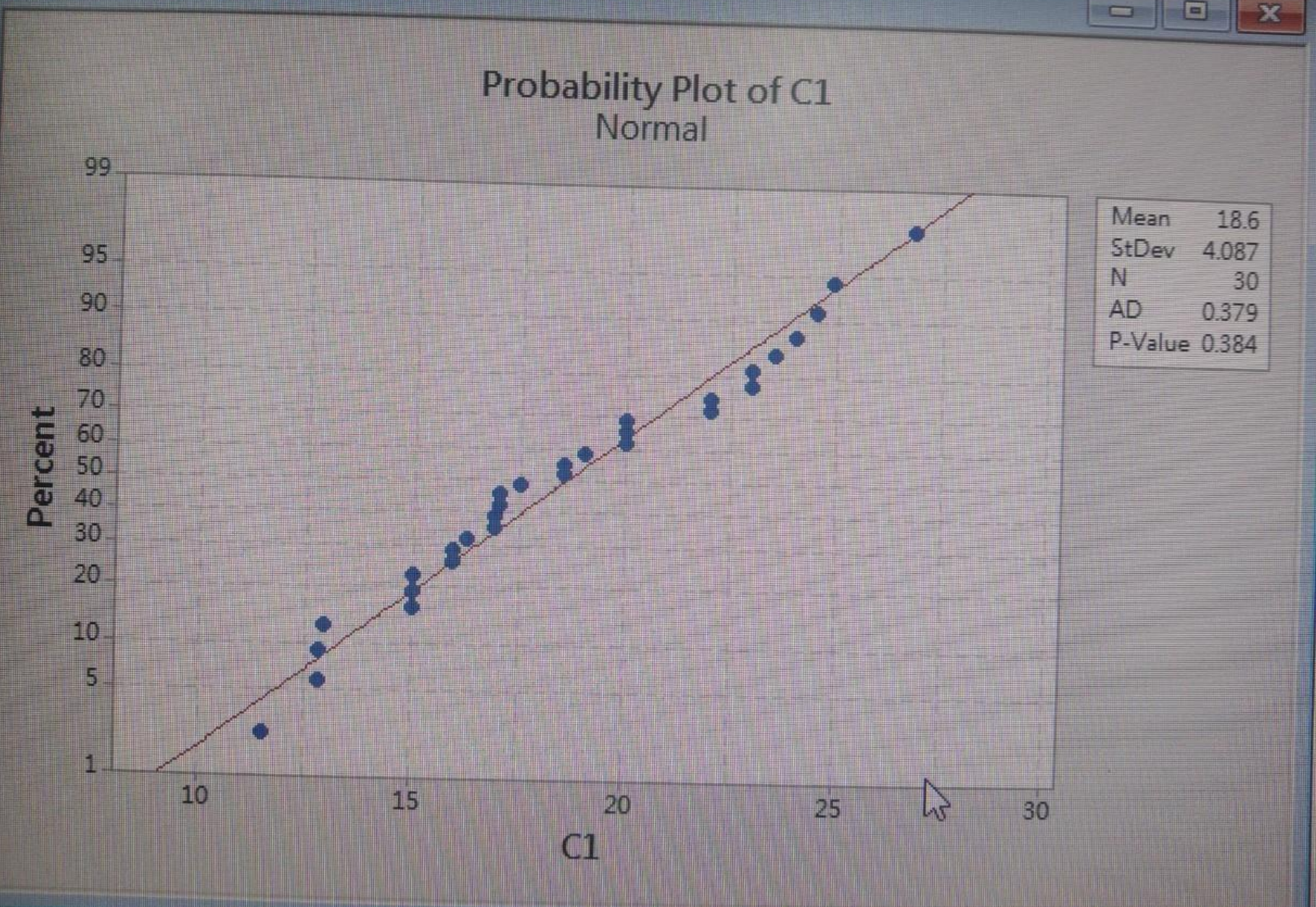


	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	C17	C18	C19	C20	C21	C22	C23	C24	C25	C26
	A	B	C	D																						
1	1	1	1	1	14	18	21	23																		
2	1	2	2	2	16	22	17	29																		
3	1	3	3	3	27	19	25	23																		
4	2	1	2	3	17	22	21	19																		
5	2	2	3	1	24	21	18	23																		
6	2	3	1	2	21	13	26	22																		
7	3	1	3	2	27	25	17	21																		
8	3	2	1	3	19	22	25	18																		
9	3	3	2	1	15	23	22	26																		
10																										
11																										
12																										
13																										
14																										
15																										
16																										





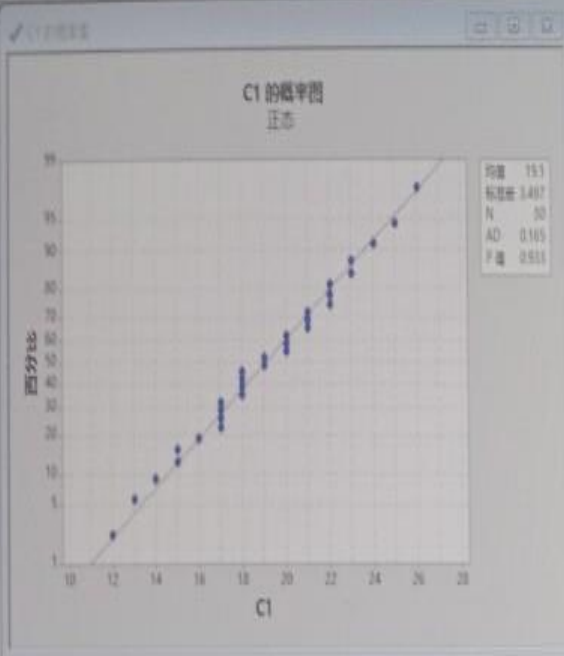
✓ Probability Plot of C1



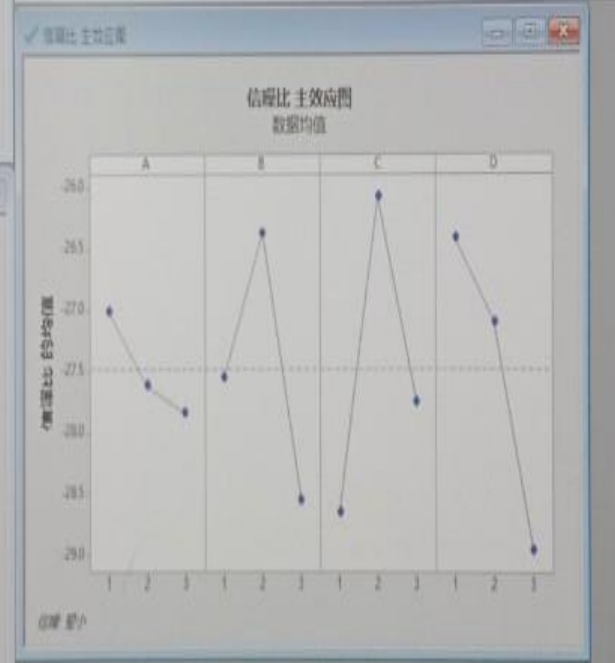
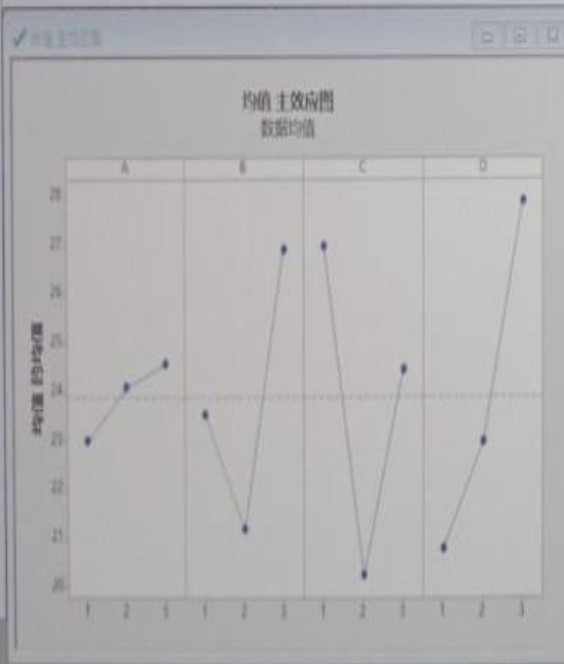




1	22
2	17
3	15
4	14
5	18
6	12
7	15
8	17
9	18
10	13
11	23
12	26
13	21
14	18
15	22
16	23
17	20
18	20
19	24
20	21
21	18
22	17
23	19
24	25
25	21
26	22
27	20
28	19
29	17
30	16



1	C1	C2	C3	C4	C5	C6	C7	C8
	A	B	C	D				
1	1	1	1	1	20.0	26.0	23.3	21.3
2	1	2	2	2	14.6	12.3	19.5	16.6
3	1	3	3	3	27.4	37.7	27.3	30.0
4	2	1	2	3	22.7	24.9	28.9	19.9
5	2	2	3	1	17.7	16.7	16.2	24.9
6	2	3	1	2	27.0	30.6	36.1	23.5
7	3	1	3	2	20.0	32.9	21.6	21.0
8	3	2	1	3	35.4	26.8	23.0	30.7
9	3	3	2	1	20.2	19.5	22.2	21.6



### 均值响应表

水平	A	B	C	D
1	-27.00	-27.54	-28.66	-26.40
2	-27.61	-28.36	-28.06	-27.09
3	-27.84	-28.56	-27.74	-28.96
Delta	0.84	2.19	2.66	2.66
排列	4	3	1	2

### 均值 主效应图

### 信噪比 主效应图