

One-way ANOVA: responses versus levels

Method

Null hypothesis All means are equal
Alternative hypothesis Not all means are equal
Significance level $\alpha = 0.05$

Equal variances were assumed for the analysis.

Factor Information

Factor	Levels	Values
levels	5	10, 30, 50, 70, 90



Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
levels	4	1627	406.8	1.59	0.177
Error	295	75576	256.2		
Total	299	77203			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
16.0059	2.11%	0.78%	0.00%

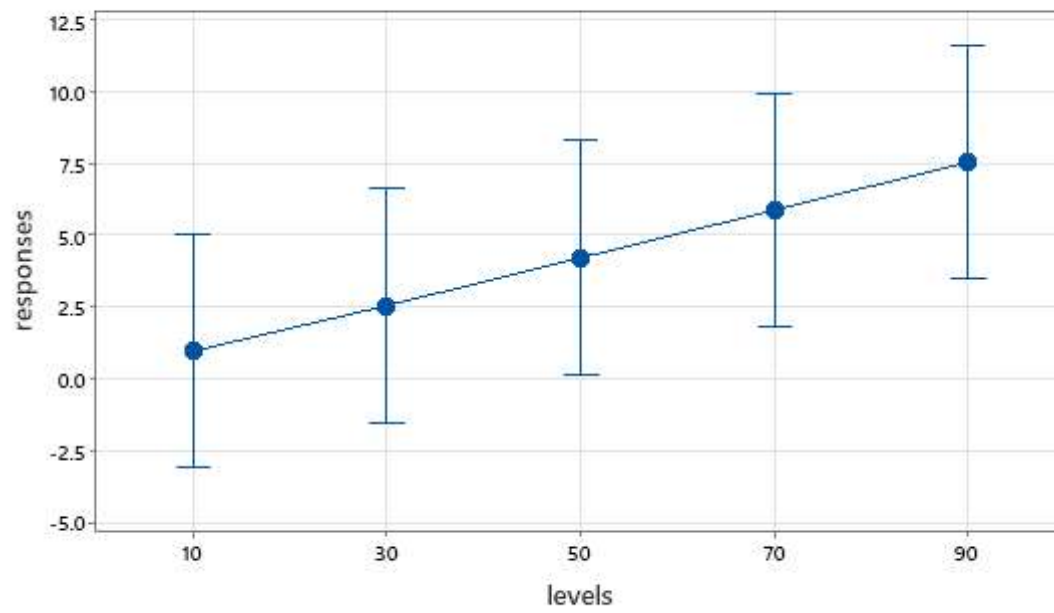
Means

levels	N	Mean	StDev	95% CI
10	60	0.943	2.760	(-3.124, 5.010)
30	60	2.52	8.35	(-1.54, 6.59)
50	60	4.19	13.93	(0.12, 8.25)
70	60	5.85	19.51	(1.78, 9.91)
90	60	7.51	25.08	(3.45, 11.58)

Pooled StDev = 16.0059

Interval Plot of responses vs levels

95% CI for the Mean



The pooled standard deviation is used to calculate the intervals.