

# Factorial Regression: Max. Throughput versus Error Rate, learning\_rate

## Coded Coefficients

Term	Effect	Coef	SE Coef	T-Value	P-Value	VIF
Constant		84320	1256	67.12	0.000	
Error Rate	-1133	-567	1256	-0.45	0.653	1.00
learning_rate	907	453	1256	0.36	0.719	1.00
Error Rate*learning_rate	680	340	1256	0.27	0.787	1.00

## Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
13762.2	0.35%	0.00%	0.00%

## Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Model	3	77066667	25688889	0.14	0.939
Linear	2	63194667	31597333	0.17	0.847
Error Rate	1	38533333	38533333	0.20	0.653
learning_rate	1	24661333	24661333	0.13	0.719
2-Way Interactions	1	13872000	13872000	0.07	0.787
Error Rate*learning_rate	1	13872000	13872000	0.07	0.787
Error	116	21970165333	189397977		
Total	119	22047232000			

## Regression Equation in Uncoded Units

Max. Throughput = 84748 - 9822 Error Rate + 25185 learning\_rate + 755556 Error Rate\*learning\_rate

## Fits and Diagnostics for Unusual Observations

Obs	Max. Throughput	Fit	Resid	Std Resid
11	115600	85000	30600	2.26 R
107	122400	82960	39440	2.91 R
113	122400	84773	37627	2.78 R
119	115600	84773	30827	2.28 R

R Large residual

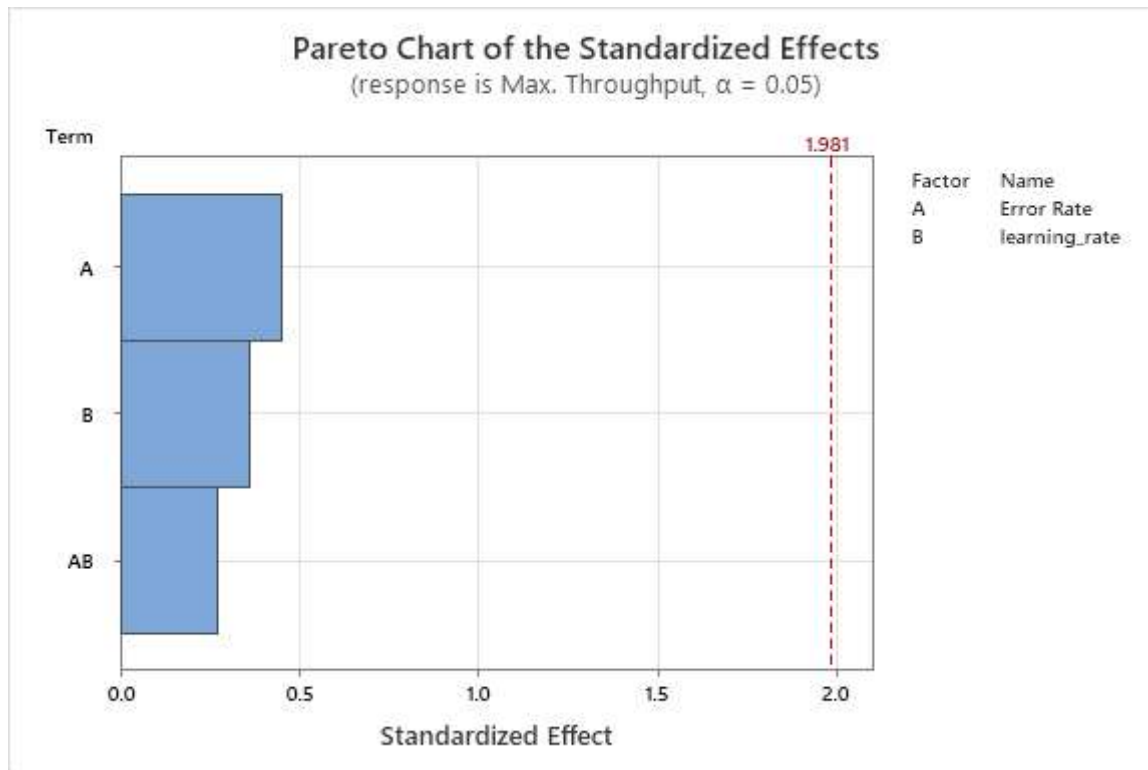
## Alias Structure

Factor	Name
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A Error Rate  
B learning\_rate

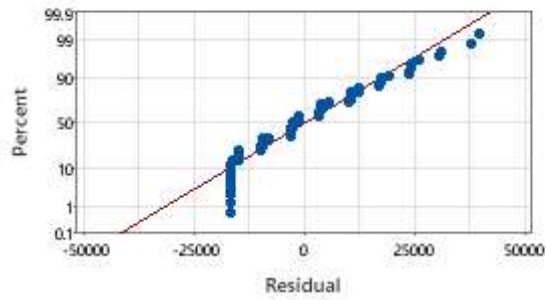
### Aliases

I  
A  
B  
AB

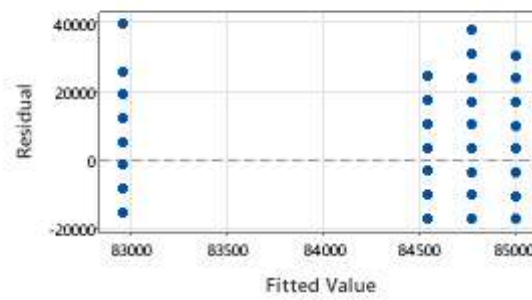


## Residual Plots for Max. Throughput

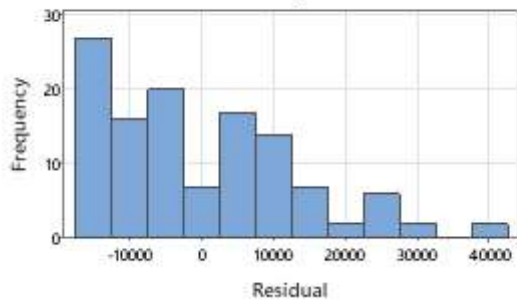
Normal Probability Plot



Versus Fits



Histogram



Versus Order

