

MULTIPLE LINEAR REGRESSION WITH DUMMY VARIABLES

A	B	C	Product	Value	X ₁	X ₂
470	520	610	1	470	0	0
510	570	550	1	510	0	0
540	530	620	1	540	0	0
560		590	1	560	0	0
580			1	580	0	0
			2	520	1	0
			2	570	1	0
			2	530	1	0
			3	610	0	1
			3	550	0	1
			3	620	0	1
			3	590	0	1

"Stacked"

$$E(Y) = \beta_0 + \beta_1 X_1 + \beta_2 X_2$$

$$X_1 = \begin{cases} 1 & \text{if Product B} \\ 0 & \text{otherwise} \end{cases}$$

$$X_2 = \begin{cases} 1 & \text{if product C} \\ 0 & \text{otherwise} \end{cases}$$

Model Summary (Value)

R	R Square	Adjusted R Square	Std. Error of the Estimate
.66	.43	.31	36.14

ANOVA (Value)

	Sum of Squares	df	Mean Square	F	Sig.
Regression	8936.67	2	4468.33	3.42	.079
Residual	11755.00	9	1306.11		
Total	20691.67	11			

Coefficients (Value)

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	532.00	16.16	.00	32.92	.000
B	8.00	26.39	.08	.30	.769
C	60.50	24.24	.69	2.50	.034