```
REGRESSION

/DESCRIPTIVES MEAN STDDEV CORR SIG N

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT Drownings

/METHOD=ENTER IceCreamSales Rain Interaction

/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID).
```

## Regression

[DataSet1] C:\Sruti\Coursework\Research method - II\Homework2\HW 2 Data.sav

### **Descriptive Statistics**

	Mean	Std. Deviation	N
Number of reported drownings	18.0833	6.48680	36
Number of ice cream truck sales (in thousands)	5.3333	4.09180	36
Average monthly rainfall	4.1208	3.16960	36
Interaction	15.9083	15.48171	36

### Correlations

		Number of reported drownings	Number of ice cream truck sales (in thousands)	Average monthly rainfall
Pearson Correlation	Number of reported drownings	1.000	.720	729
	Number of ice cream truck sales (in thousands)	.720	1.000	481
	Average monthly rainfall	729	481	1.000
	Interaction	384	.241	.527
Sig. (1-tailed)	Number of reported drownings		.000	.000
	Number of ice cream truck sales (in thousands)	.000		.001
	Average monthly rainfall	.000	.001	
	Interaction	.010	.079	.000
N	Number of reported drownings	36	36	36
	Number of ice cream truck sales (in thousands)	36	36	36
	Average monthly rainfall	36	36	36
	Interaction	36	36	36

### Correlations

		Interaction			
Pearson Correlation	Number of reported drownings	384			
	Number of ice cream truck sales (in thousands)				
	Average monthly rainfall	.527			
	Interaction	1.000			
Sig. (1-tailed)	Number of reported drownings	.010			
	Number of ice cream truck sales (in thousands)	.079			
	Average monthly rainfall	.000			
	Interaction				
N	Number of reported drownings	36			
	Number of ice cream truck sales (in thousands)	36			
	Average monthly rainfall	36			
	Interaction	36			

# Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	Interaction, Number of ice cream truck sales (in thousands), Average monthly rainfall	•	Enter

- a. Dependent Variable: Number of reported drownings
- b. All requested variables entered.

# Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.921 <sup>a</sup>	.848	.834	2.64572

- a. Predictors: (Constant), Interaction, Number of ice cream truck sales (in thousands) , Average monthly rainfall
- b. Dependent Variable: Number of reported drownings

### **ANOVA**<sup>a</sup>

Mode	le	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1248.755	3	416.252	59.466	.000 <sup>b</sup>
	Residual	223.995	32	7.000		
	Total	1472.750	35			

- a. Dependent Variable: Number of reported drownings
- b. Predictors: (Constant), Interaction, Number of ice cream truck sales (in thousands) , Average monthly rainfall

### **Coefficients**<sup>a</sup>

		Unstandardize	ed Coefficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	14.783	1.379		10.718	.000
	Number of ice cream truck sales (in thousands)	1.362	.167	.859	8.166	.000
	Average monthly rainfall	011	.246	005	045	.964
	Interaction	246	.045	588	-5.415	.000

a. Dependent Variable: Number of reported drownings

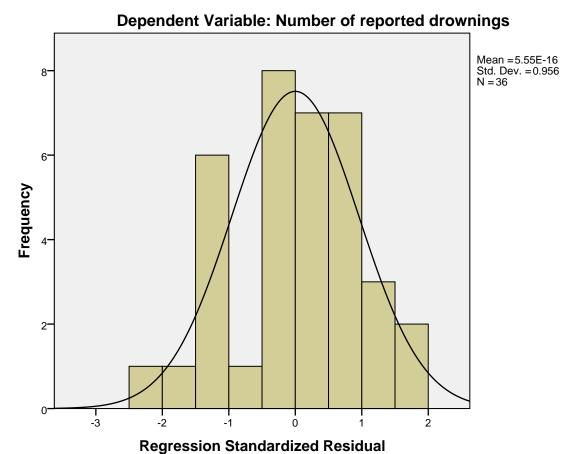
Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	10.6226	35.2077	18.0833	5.97317	36
Residual	-5.61921	5.11258	.00000	2.52979	36
Std. Predicted Value	-1.249	2.867	.000	1.000	36
Std. Residual	-2.124	1.932	.000	.956	36

a. Dependent Variable: Number of reported drownings

### Charts

Histogram



Normal P-P Plot of Regression Standardized Residual

