The study done on the data set revealed which classes will be the best for distinguishing each feature. Measure 1 will be a good method of determining a Setosa from a Versicolor and Virginica, measure 2 will not be a good method to distinguish any feature, measure 3 will be a good method of determining a Setosa from a Versicolor and Virginica, and measure 4 will be a good way to differentiate all 3 feature types.

	Sepal Length	Sepal Width	Pedal Length	Pedal Width
Minimum	4.3	2.0	1.0	0.1
Maximum	7.9	4.4	6.9	2.5
Mean	5.84	3.06	3.76	1.20
Variance	0.68	0.19	3.10	0.58
Within-Class Variance	0.26	0.11	0.18	0.04
Between-Class Variance	0.42	0.08	2.91	0.54

Setosa Vs. Versi+Virigi : All Features
Batch Perceptron did Not Converge!
Least Squares Weight Vectors:
[[0.06602977 0.24284787 -0.22465712 -0.05747273 0.11822289]]
Least Squares Misclassifications: 100

.Setosa VS Versi+Virigi: Features 3 and 4
Batch Perceptron Converged!
Batch Perceptron # of Epochs: 54
Batch Perceptron Weight Vectors: [-65.301   7.732 33.58]
Batch Perceptron Misclassifications: 0
Least Squares Weight Vectors: [[-0.25132905 0.00983426 1.26603335]]
Least Squares Misclassifications: 64

Virgi VS Versi+Setosa : All Features
Batch Perceptron did Not Converge!
Least Squares Weight Vectors:
 [[-0.04587608 0.20276839 0.00398791 0.55177932 -0.69528186]]
Least Squares Misclassifications: 100

Virgi VS Versi+Setosa: Features 3 and 4
Batch Perceptron did Not Converge!
Least Squares Weight Vectors: [[-0.07300611 0.64025527 -0.16018919]]
Least Squares Misclassifications: 53

Virgi VS Versi VS Setosa: Features 3 and 4
Least Squares Weight Vectors Setosa VS Versicolor: [[-0.25021329 -0.22538328 1.39301148]]
Least Squares Weight Vectors Setosa VS Virginica: [[-0.14560013 -0.21100454 1.25032081]]
Least Squares Weight Vectors Versicolor VS Virginica: [[0.19764057 0.66343621
-1.58154371]]
Least Squares Misclassifications Setosa VS Versicolor: 0
Least Squares Misclassifications Setosa VS Virginica: 0
Least Squares Misclassifications Versicolor VS Virginica: 50