# Final Project Part 1

Forest Polchow

# 1) What are the key predictors for determining score on the 7th Grade Common Core Math assessment?

*Relevant Variables:*

School Location (District)

Income Levels

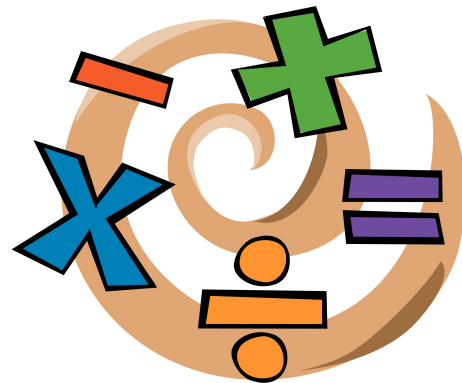Size of School

School Quality Review

*Hypothesis:*

School safety, number of students on free or reduced-price lunch and quality of teacher instruction will have the largest impact on student test achievement.

Data Source: NYC Department of Education

http://schools.nyc.gov/NR/rdonlyres/782C5EFD-D762-4B76-A791-558E4798B687/0/20052016_QR_Ratings.xlsx

http://schools.nyc.gov/NR/rdonlyres/C7E210CA-F686-4805-BEA6-EDD91F76E58B/199999/CitywideMathResults20132016Public.xlsx

# 2) Is there a way to predict the quality of a movie without relying on critics or our own instincts?

*Relevant Variables:*
Actor
Director
Actor Facebook Likes
Release Date
Budget
Genre
Country of Release

*Hypothesis:*
Director and Actors will have the largest impact on the overall movie rating.

Data Source:  Kaggle

https://www.kaggle.com/deepmatrix/imdb-5000-movie-dataset

# 3) How effective are bike lanes at preventing bicycle accidents in NYC?

*Relevant Variables:*

Types of bike lanes

Location

Type of Accident

*Hypothesis:*

The precincts with more shared bike lanes and protected bike lanes will have fewer accidents than those without.

Data Source:  NYC Department of Transportation

http://www.nyc.gov/html/dot/downloads/pdf/bicycle-crash-data-report-2015.pdf