

MGMT 228: Analytical Methods

Use the web to find us an example of "statistics" being used in the world to make an argument.

ANY and **ALL** examples welcome.

Justin Leinaweaver (Spring 2022)

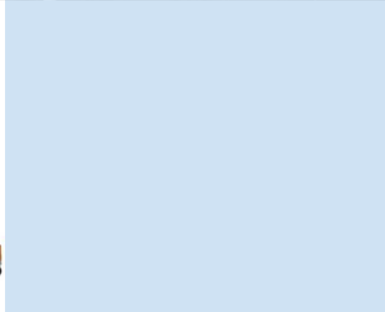
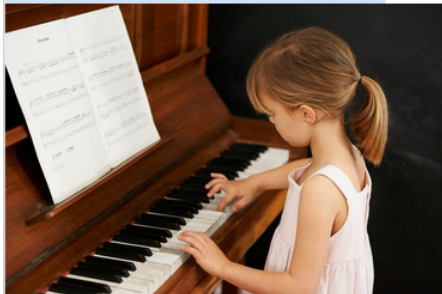
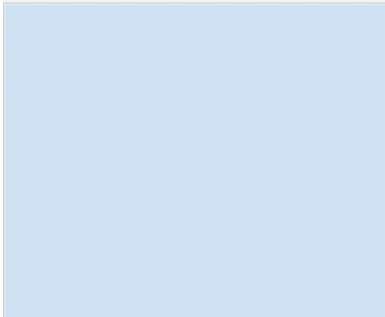
Introductions

- Name
- Year in school
- Major
- Dream job

What is something you learned in intro statistics (MATH 227) that has proved useful in your life?

What is something you learned in
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Optional: ...that has proved useful
in your life?



Learning Outcomes

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- 1 Collect and critically evaluate data from a variety of sources (e.g. government sources, surveys, etc.)

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- 2 Use basic data analytics tools to support decision-making (e.g. univariate, bivariate and multivariate approaches including regression), and
- 3 Apply a set of more advanced tools that expand the utility of these models (e.g. forecasting, seasonality, nonlinearity, constrained dependent variables, etc.).

Backup your files to the cloud!



Grade

Participation	25%
Visualizations Report	15%
Simple OLS Report	20%
Multiple OLS Report	20%
Final Report	20%

Participation

- Get to class on time,
- Have the materials you need to be productive,
- Do the work in class, and
- Save your work.

Excused absence coming up?

It is your
responsibility to
be responsible
for your
responsibilities.



som^{ee}cards
user card

It is your responsibility to notify me and to complete
a make-up assignment.



**YEAH, IF YOU COULD KEEP ME IN
THE LOOP**

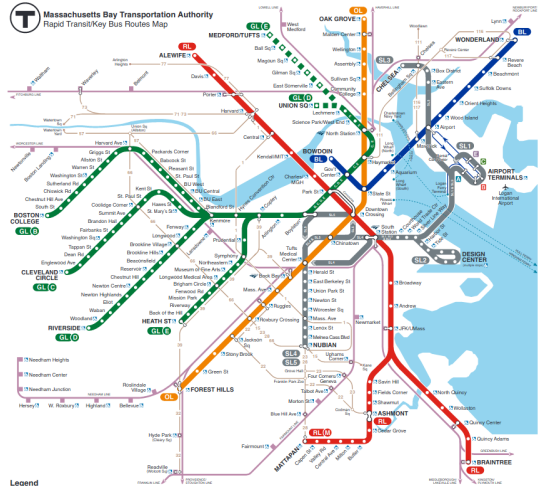
THAT'D BE GREAT

memegenerator.net

What is a model?

Boston's Subway System

The "T"





T Rapid Transit and Key Bus Routes

MASSACHUSETTS BAY
TRANSPORTATION AUTHORITY
MBTA.COM



Legend

- Blue Line
- Green Line and its branches
- Orange Line
- Red Line
- Silver Line (Blue Rapid Transit)
- Commuter Rail
- Key Bus Route (Frequent Service)
- Commuter Ferry Route
- Subway Transfer station to bus/commuter rail

Accessibility

- All bus, ferry services, not marked commuter rail and subway stations are accessible
- Not accessible station
- MBTA Service

Customer Service and Travel Information

- 617-222-3000
- 800-392-0100
- 617-222-0148 TTY
- Website
- MBTA Transit Police
- 617-222-0110
- 617-222-1000 TTY
- Elevator, escalator and lift updates
- 800-392-6100

Map of Boston Region, 2018. MBTA.com, 617-222-3000





Maps are:

- Neither true nor false
- Limited in their accuracy
- Partial representations
- Useful for only some uses
- A reflection of the interests of the designer



Scientific models are:

- Neither true nor false
- Limited in their accuracy
- Partial representations
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What drives economic investment in US states?



Why do some countries attract greater levels of international investment than others?



What explains why some individuals make more money than others?

For Thursday

Come to class ready to make an argument:

If you were starting a new business in the US **what** would it be, **where** specifically would you do it and what **criteria** did you use to decide?

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(**supported by at least one piece of high
quality evidence**)

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