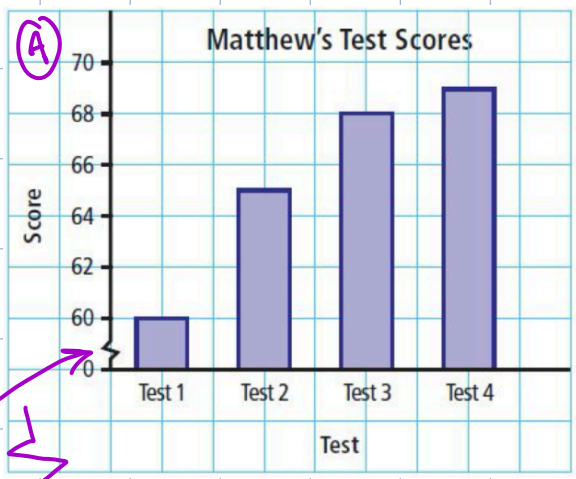
147-148

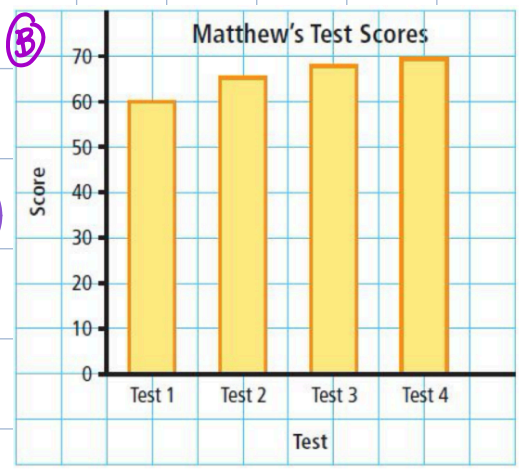
9B - Misrepresenting Data

What are ways data can be misrepresented?

① Scale



VS

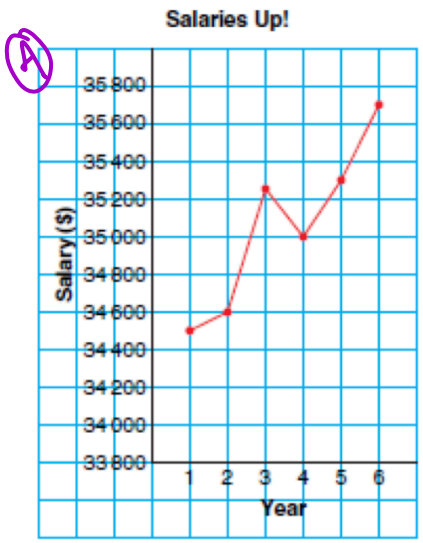


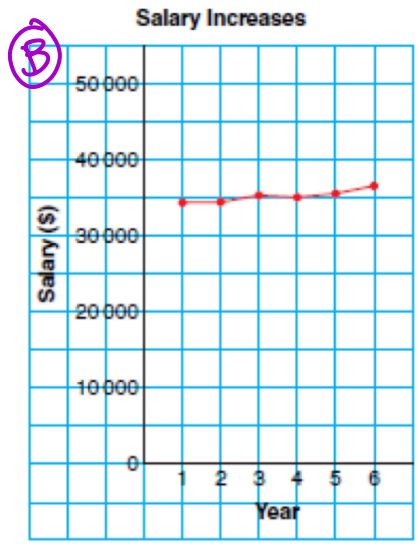
line break

skip a chunk of numbers

What do you notice about these two graphs?

- Same data, shown differently
- (A) - Data looks like it has a greater range vs (B) looks more consistent





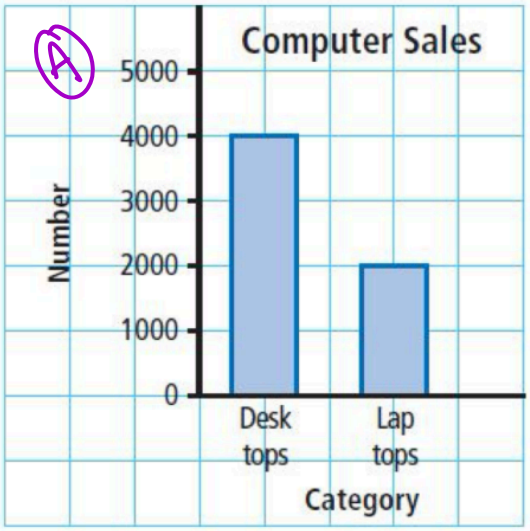
* DATA is the same

What do you notice about these two graphs?

A- Appears to have greater ↑ in salary

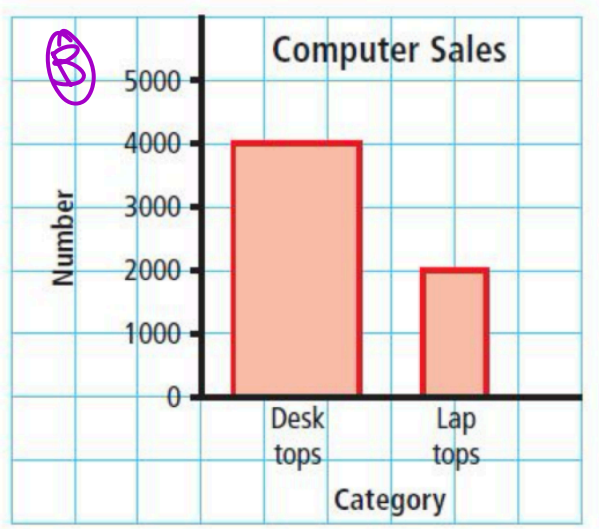
B - Consistent salary over time.

(2) Changing the visuals



Graph A

VS



Graph B

What do you notice about these two graphs?

- B- Desk top bar draws attention

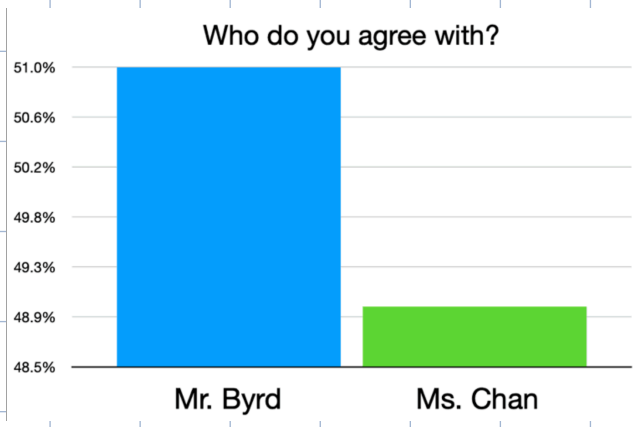




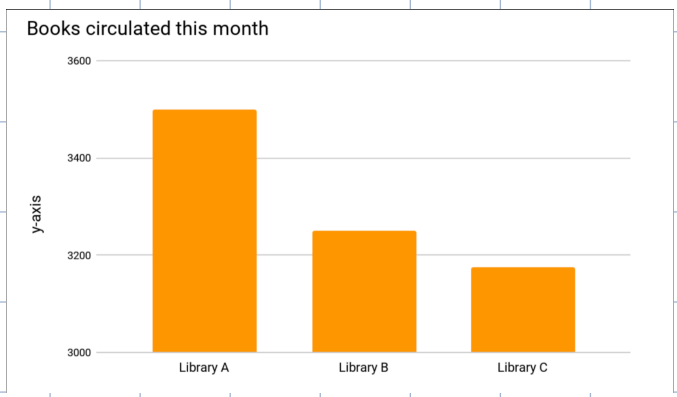
What do you notice about these two graphs?

- Changing perception of data by highlighting specific parts.

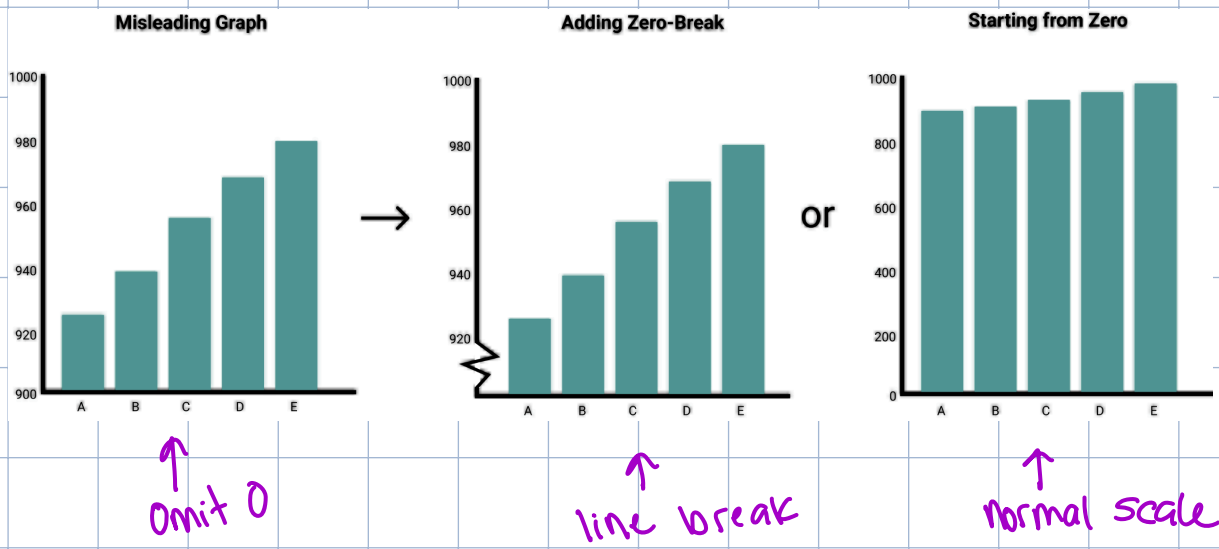
③ Changing or Omitting the scale



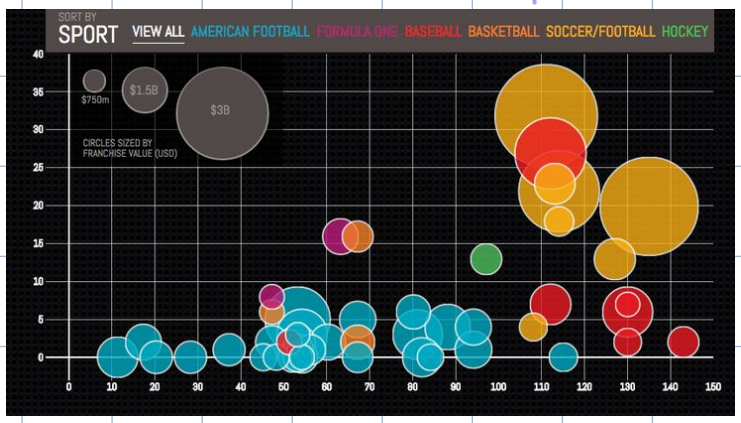
How does the scale of these graphs change how you interpret the data?

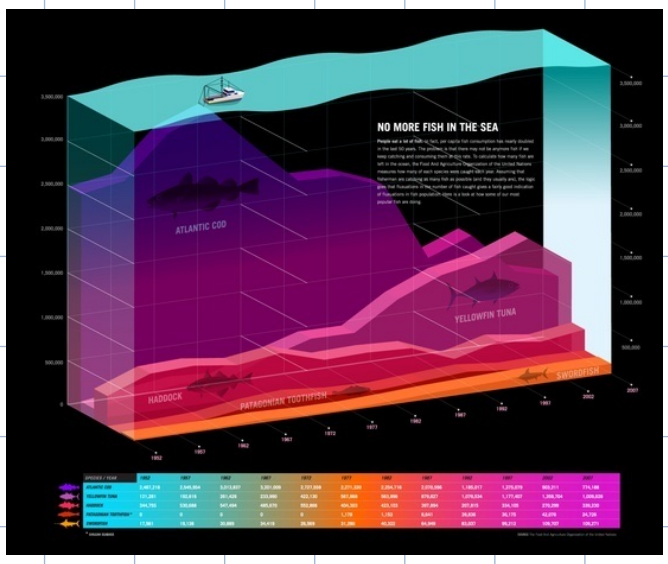


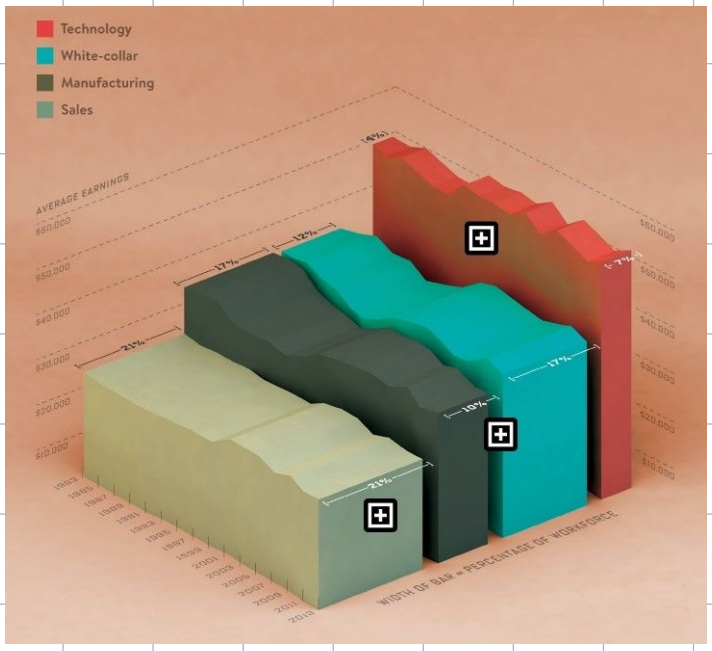
- Omit "0" makes it look like data has bigger change

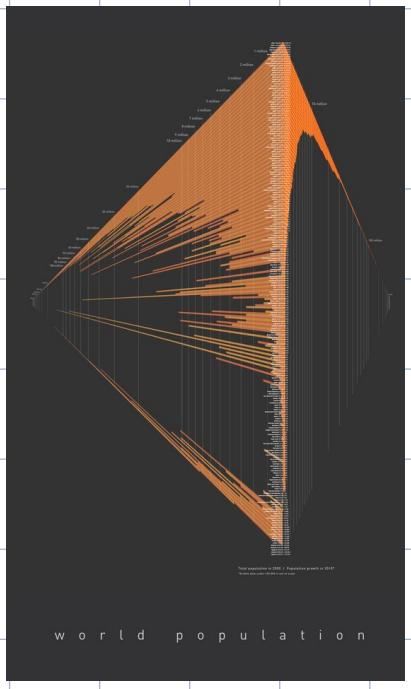


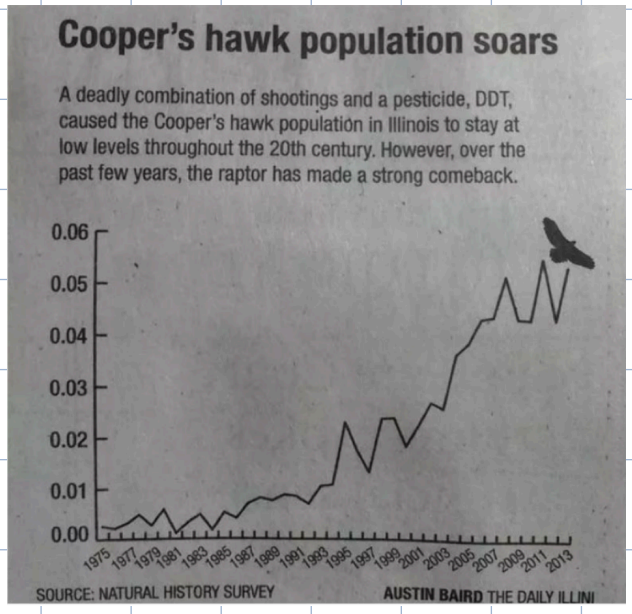
Other examples

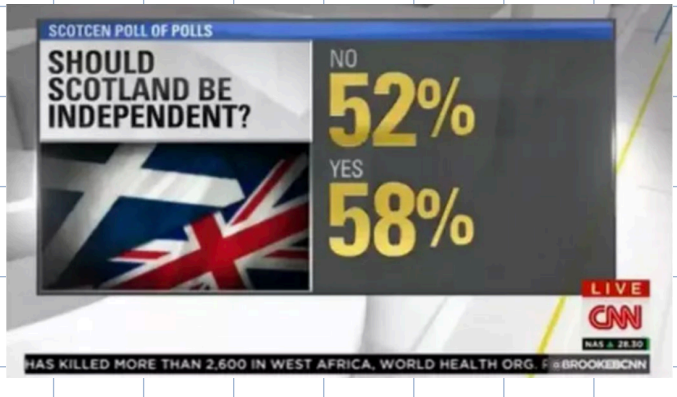












Why would someone misrepresent data?

- Influence how others view / feel / think about information

Why?

- Sell things
- Win arguments / Prove point
- Create fear / excitement
- Hide a problem

Spotting Misleading Data

- [ ] Check axis
- [ ] Check time frame
- [ ] Check for tricky visuals
- [ ] Check labels + units
- [ ] Check for too much / too little info
- [ ] Check source
- [ ] Ask: What is this graph trying to make me think?