

Sample Graphs for Math 131

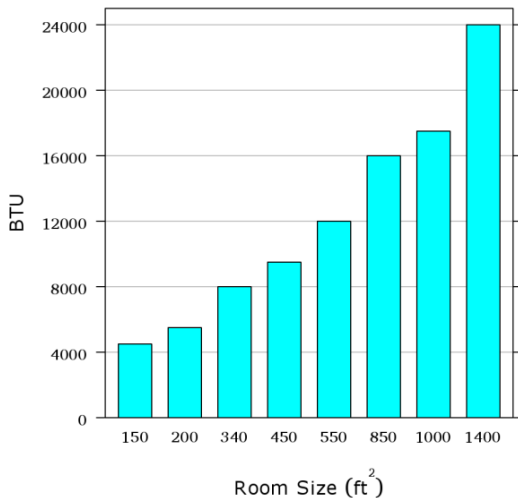
Along with the lecture on 29 August, 2008

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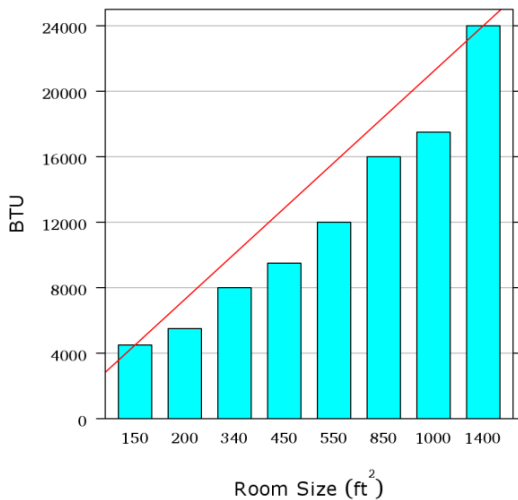
29 August 2008

Reading graphs: inductive reasoning

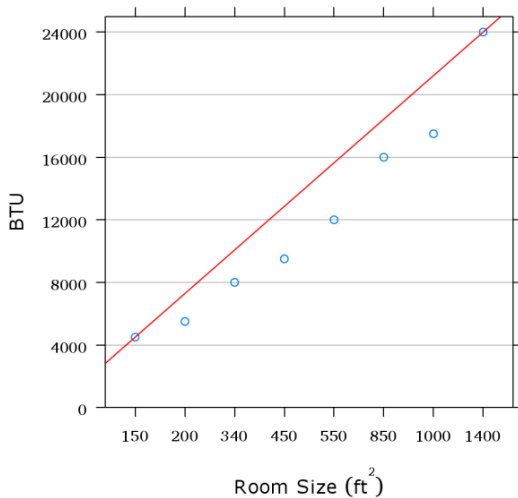


(Text figure's source: Carey, Morris, and James. *Home Improvement for Dummies*, IDG Books.)

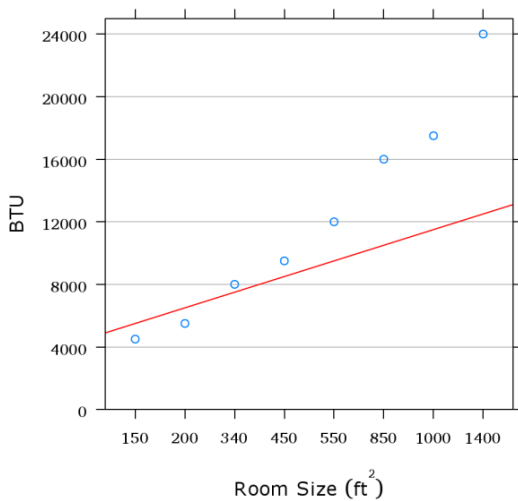
Presentation influences interpretation



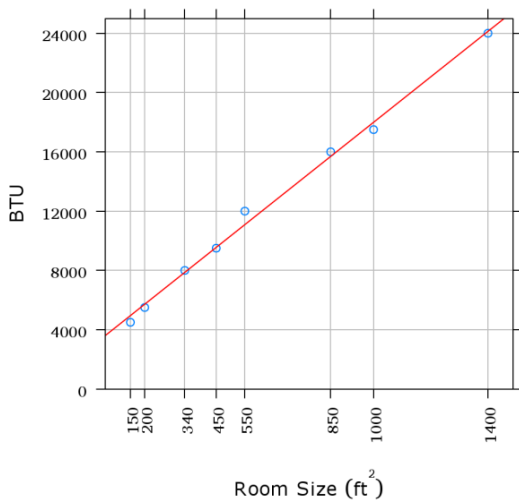
Presentation influences interpretation



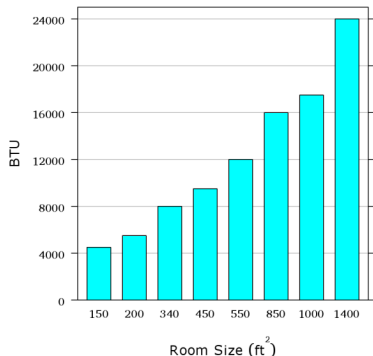
Not a line?



Rescaled to make the line apparent



Reading bar charts



The points:

- ▶ Bar charts like these often are *tables* and not graphs.
- ▶ *Inductive reasoning*: Keep track of your assumptions when extrapolating visual relationships.

Can you estimate areas?



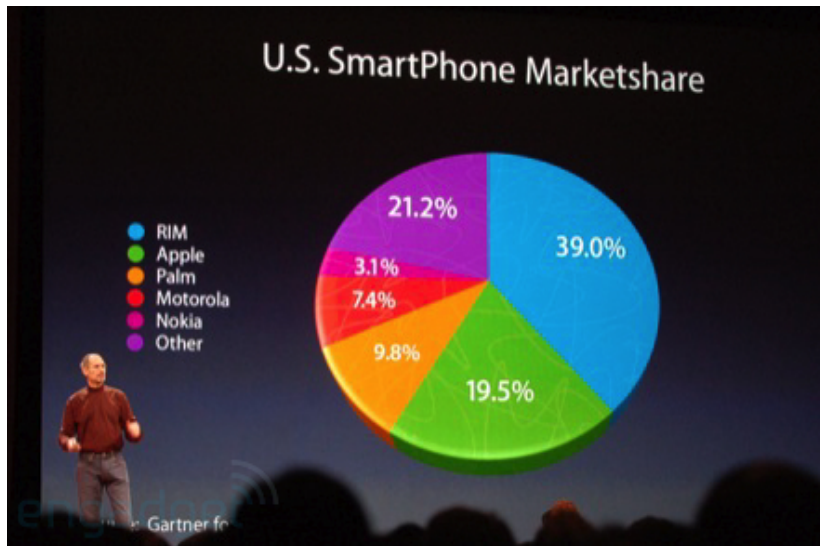
(From the Onion (<http://www.theonion.com>))

Neither can anyone else.



(From the Onion (<http://www.theonion.com>))

But if everyone does it. . .



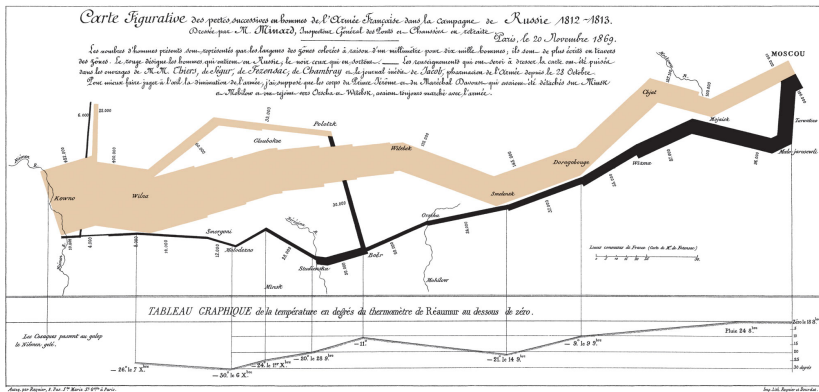
(at Macworld 2008, photo from Ryan Block of Engadget (<http://www.engadget.com>))

Better form, less exciting?

| Vendor | US market share (%) |
|--------------|---------------------|
| RIM | 39.0 |
| Apple | 19.5 |
| Palm | 9.8 |
| Motorola | 7.4 |
| Nokia | 3.1 |
| <i>other</i> | 21.2 |

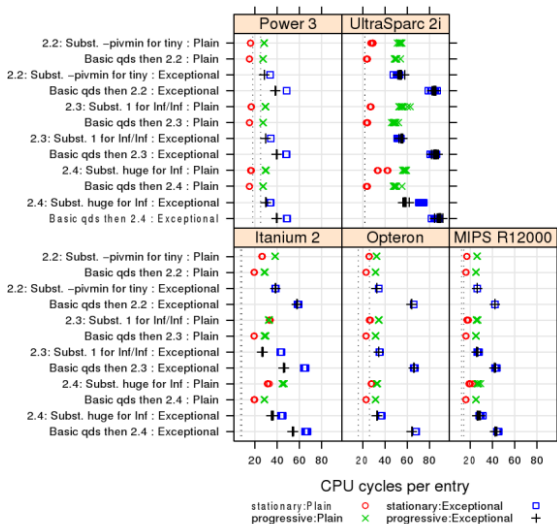
Other sure is popular.

The classic “perfect” graphic: area is not useless



Charles Joseph Minard, *Carte figurative des pertes successives en hommes de l'Armée Française dans la campagne de Russie 1812-1813*, published in 1869

Some are graphical tables



Some are for interpretation



And some end up not working out.

