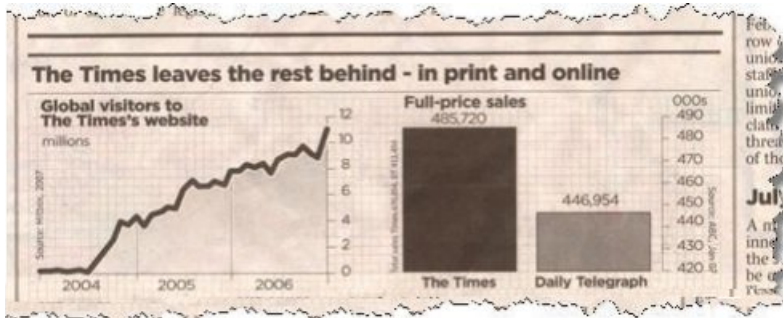


Misleading Graphs

January 20, 2017

Bar Graphs: Misleading Baseline

Does the Times have more than double the full price sales of the Daily Telegraph?

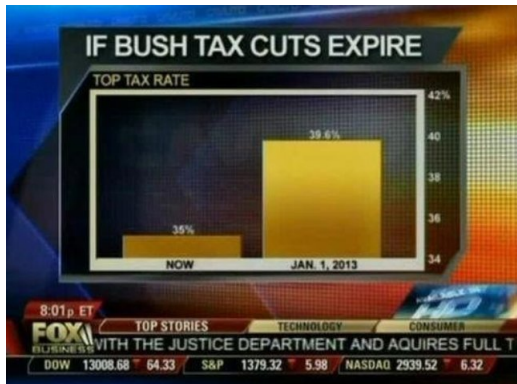


$$\frac{485,720}{446,954} \approx 1.086$$

About an 8.6% increase.

Bar Graphs: Misleading Baseline

Will the top tax rate increase sixfold?



$$\frac{39.6}{35} \approx 1.13$$

About a 13% increase.

Bar Graphs: Misleading Baseline

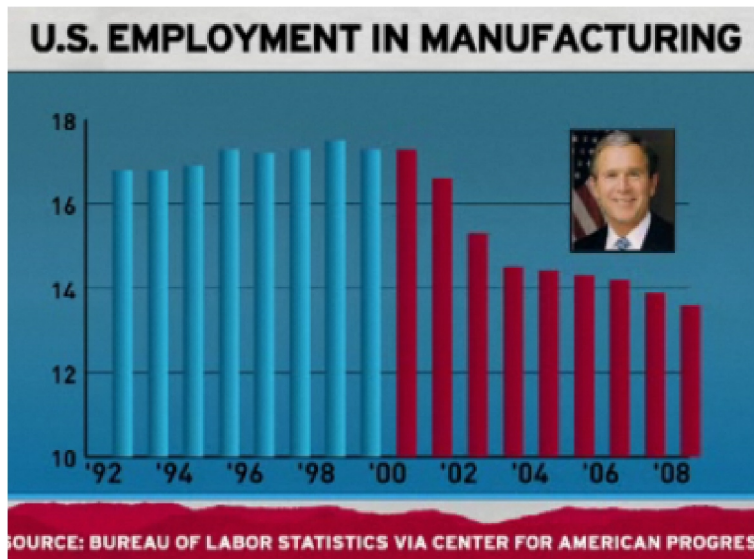
Are there four times as many people on welfare as working full time?



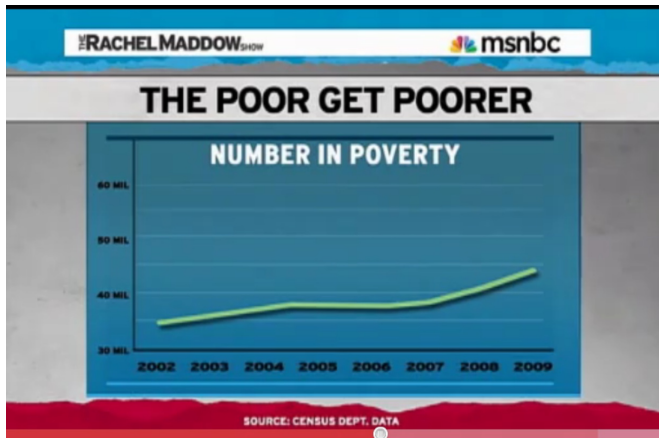
$108.6/101.7 \approx 1.067$, a 6.7% increase.

Also, these populations are not mutually exclusive: A full-time, minimum wage worker (\$7.25) can make as little as \$15,080 per year, and the poverty threshold in 2014 (which determines eligibility for social services) was \$23,850.

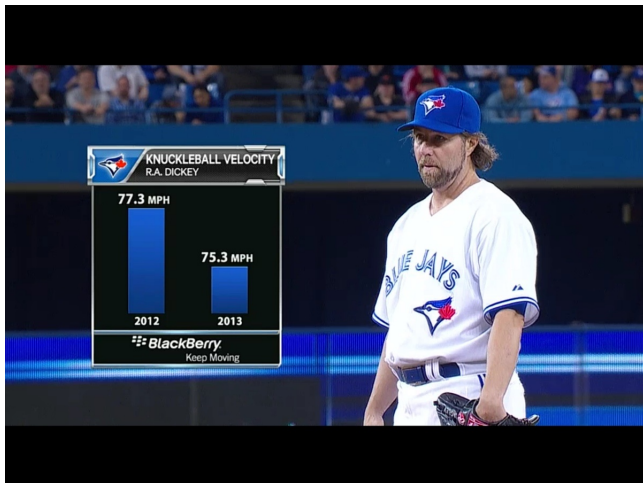
More Misleading Baselines



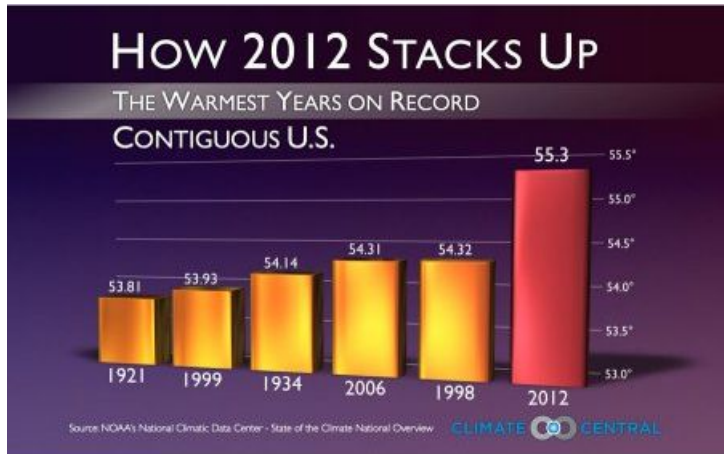
More Misleading Baselines



More Misleading Baselines



More Misleading Baselines



Pictographs: Inconsistent Proportions

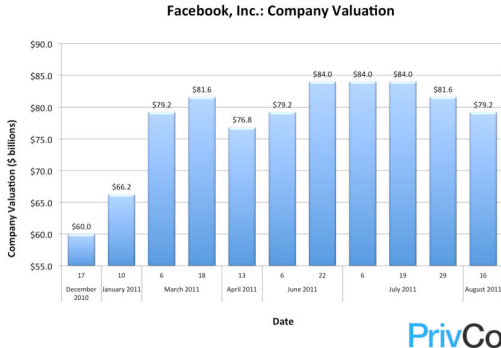
How many medals does each graphic medal represent?



US: 329, Russia: 199, Britain: 153, France: 174, Germany: 249

Inconsistent Scale

How much time passes between consecutive bars?

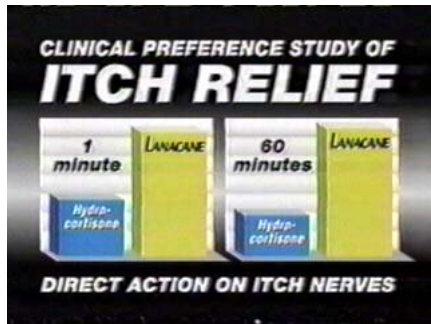


23 days, then 55, 12, 26, 54, 16, 14, 13, 10, 18.
(p.s. check the baseline.)

Inconsistent Scale

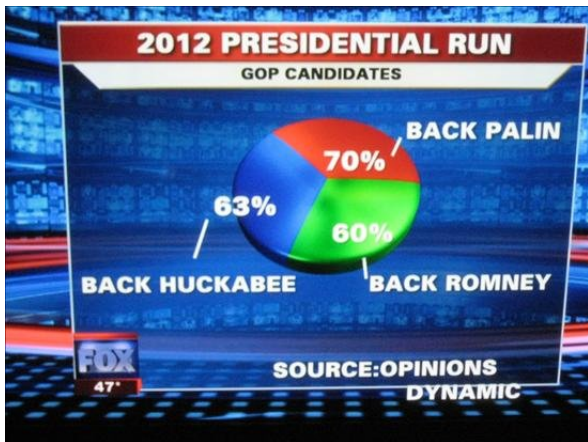


Just Wrong: No Labels



This graph contains no information!

Just Wrong: The Numbers Don't Add Up



Just Wrong: ???

