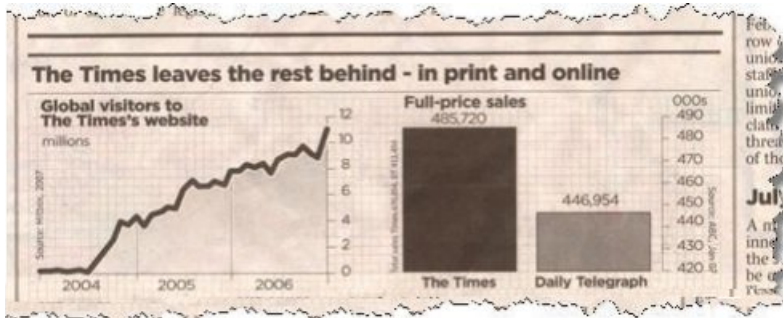


Misleading Graphs

January 16, 2016

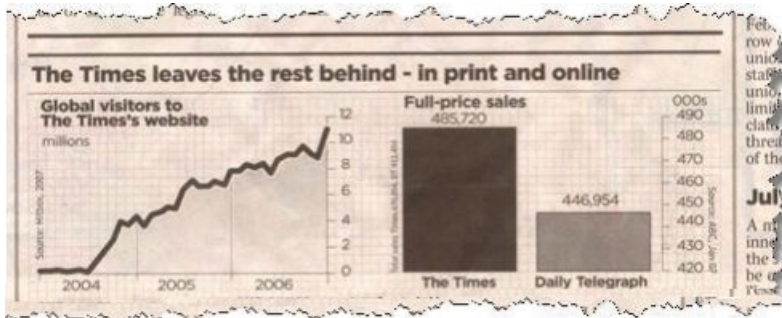
Bar Graphs: Misleading Baseline

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



Bar Graphs: Misleading Baseline

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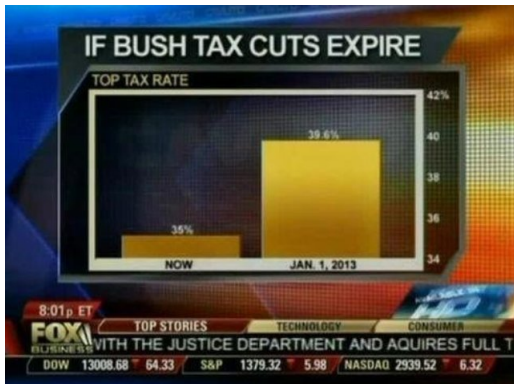


$$\frac{485,720}{446,954} \approx 1.086$$

About an 8.6% increase.

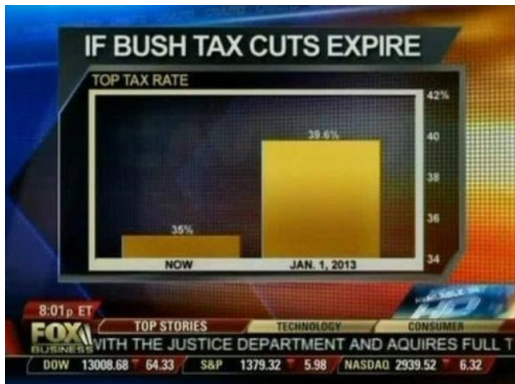
Bar Graphs: Misleading Baseline

Will the top tax rate increase sixfold?



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?



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.

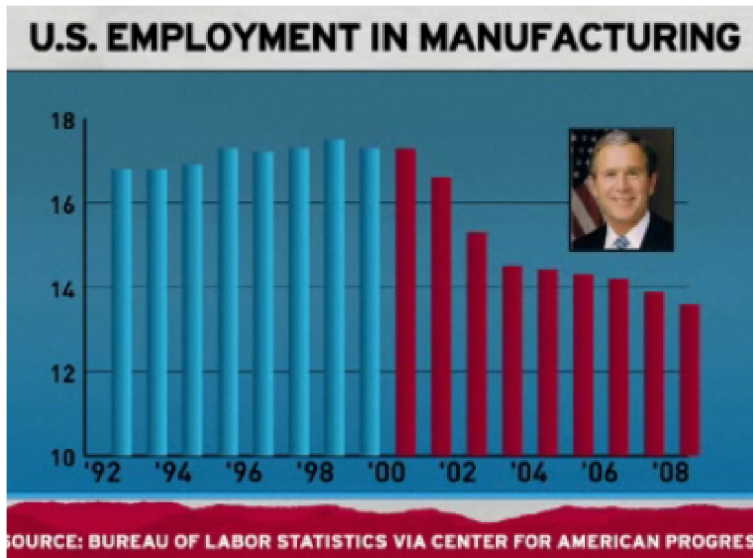
Bar Graphs: Misleading Baseline

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

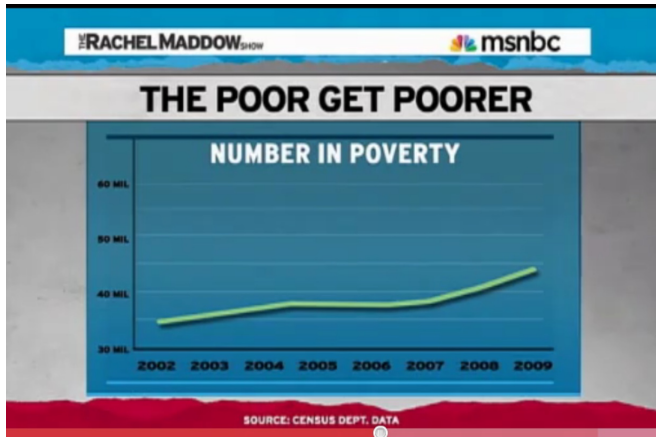


Also, these populations are not mutually exclusive: A full-time, minimum wage worker (\$7.25) can make as little as \$15,080 per year, and the poverty threshold in 2014 (which determines eligibility for social services) was \$23,850.

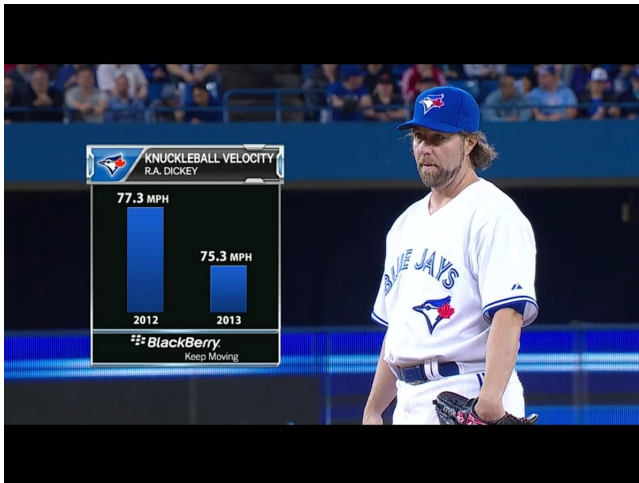
More Misleading Baselines



More Misleading Baselines



More Misleading Baselines



Pictographs: Inconsistent Proportions

How many medals does each graphic medal represent?



Pictographs: Inconsistent Proportions

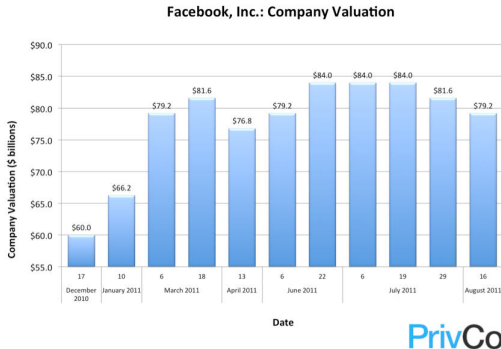
How many medals does each graphic medal represent?



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

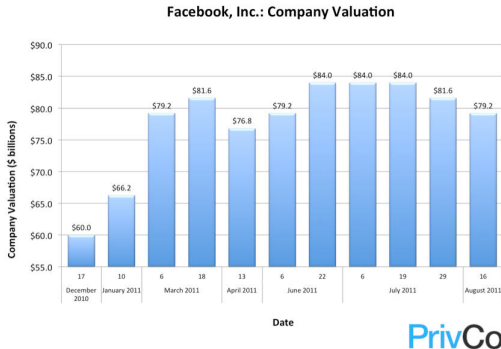
Inconsistent Scale

How much time passes between consecutive bars?



Inconsistent Scale

How much time passes between consecutive bars?

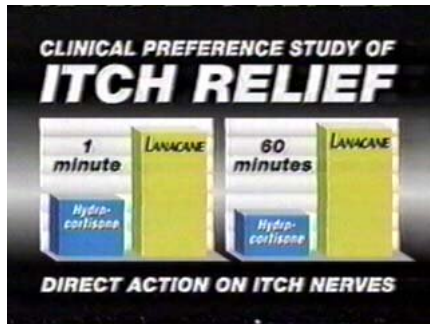


23 days, then 55, 12, 26, 54, 16, 14, 13, 10, 18.
(p.s. check the baseline.)

Inconsistent Scale

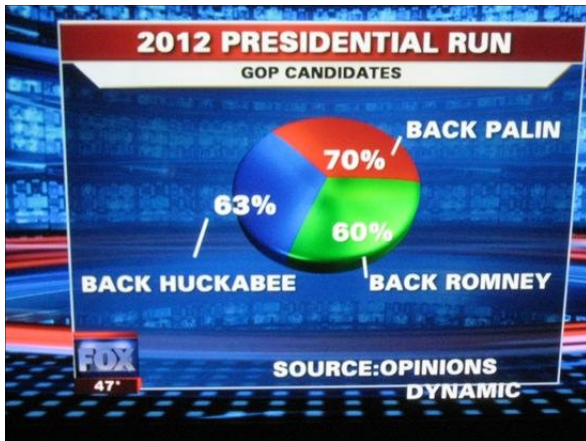


Just Wrong: No Labels



This graph contains no information!

Just Wrong: The Numbers Don't Add Up



Just Wrong: ???

