

Data on GPA and SAT scores of 1000 college students.

Source: http://www.cvgs.k12.va.us/DIGSTATS/main/inferant/a_gpas.html

$$\hat{y} = .002 + .00239x$$

SAT = 1200, predicted GPA = $.002 + (.00239)(1200) = 2.87$.

Data on distances and recession velocities of 24 galaxies.
Investigated by Edwin Hubble in 1929.

Source: <http://lib.stat.cmu.edu/DASL/Stories/Hubble'sConstant.html>

$$\hat{y} = -40.78 + 454.16x$$

Note: 1 megaparsec \approx 3,262,000 light years.

Data on winning times in the Boston marathon, 1940-1990.

Source: <http://encyclopedia.jrank.org/Cambridge/entries/000/marathon.html>

$$\hat{y} = 1072.77 - .47519x$$

	Predicted	Actual	Error
1991	126.7	131.1	4.4
1992	126.2	128.3	2.1
2005	120.0	131.7	11.7
2006	119.5	127.2	7.7
2007	119.1	134.2	15.1

Extrapolation (making predictions outside the range of the data) can be dangerous.