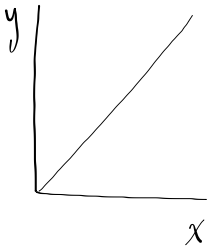
Graphical Analysis of Data

Linear Graph (b=0)



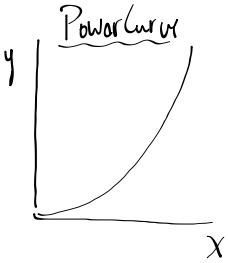
$y \propto x$

$y = kx + 0$

$(y = mx + b)$

A graph of y versus x is linear with a slope of k and a y-int. of zero)

Power Curve



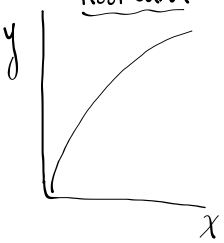
$y \propto x^n \quad (n > 1)$

$y = kx^n$

$(y = mx + b)$

A graph of y vs x^n will be linear with slope of k and a y-intercept of zero.

Root Curve



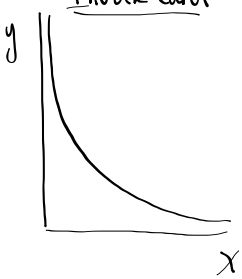
$y \propto \sqrt[n]{x} \quad (n > 0)$

$y = k\sqrt[n]{x}$

$(y = mx + b)$

A graph of y vs $\sqrt[n]{x}$ is linear with a slope of k and a y-int of zero.

Inverse Curve



$y \propto \frac{1}{x^n} \quad (n > 0)$

$y = k\left(\frac{1}{x^n}\right) + 0$

$(y = mx + b)$

A graph of y vs $\frac{1}{x^n}$ will be linear with a slope of k and a y-int. of zero.