

Linearising Relationships

Physics

Turning curves into straight lines you can actually test.

How to plot common relationships.

Relationship	Plot	Gradient
$y = kx^2$	y against x^2	k
$y = k/x$	y against $1/x$	k
$y = k\sqrt{x}$	y against $\sqrt{x}$	k
$y = ax^n$	log y against log x	n
$y = Ae^{(kx)}$	ln y against x	k

A log-log plot reveals the exponent as the gradient. That is how power laws are identified from data.