



Matemáticas para comunicar

HABILIDADES PARA EL
ÉXITO ACADÉMICO

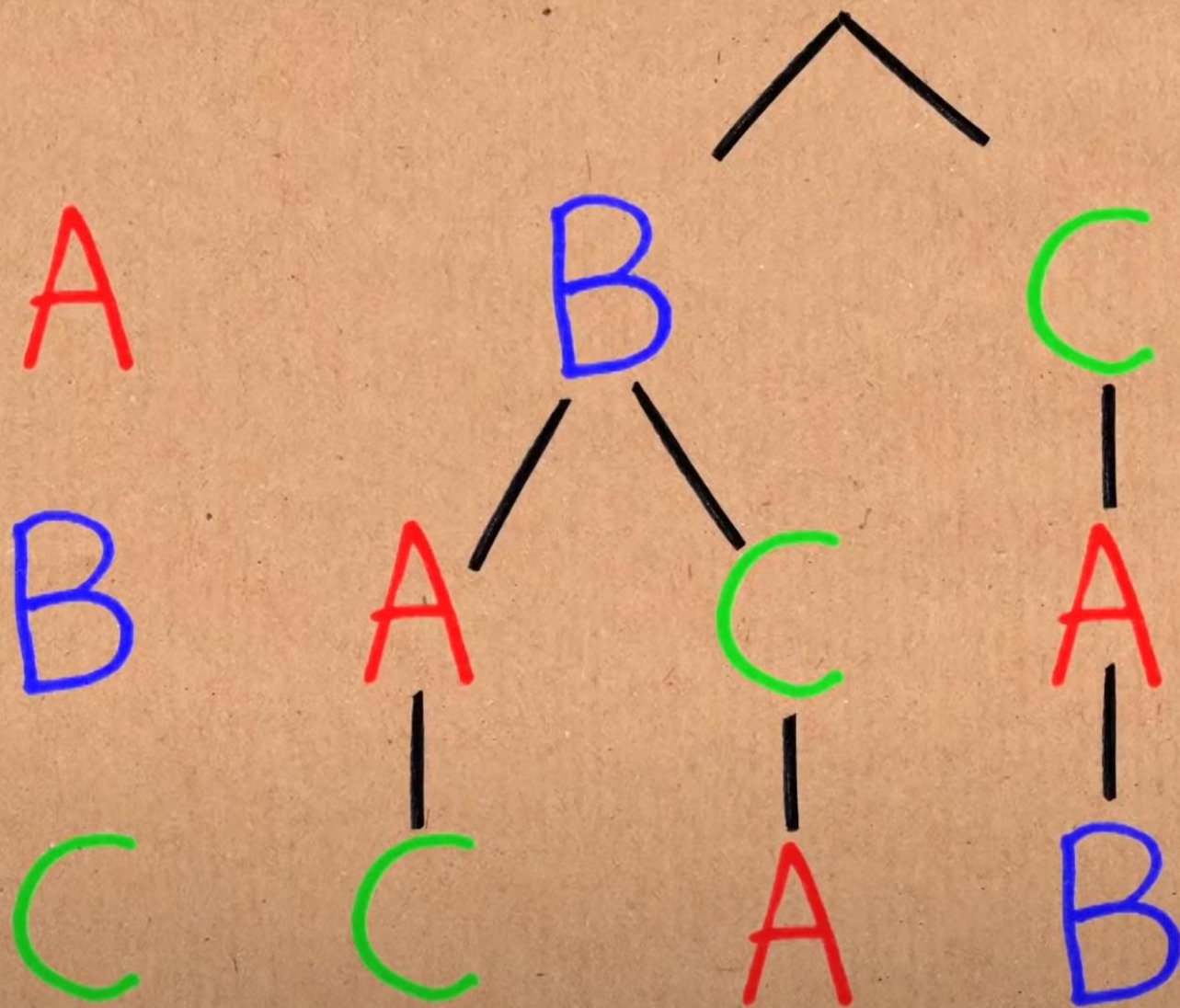
Problema de amigo secreto



ABC

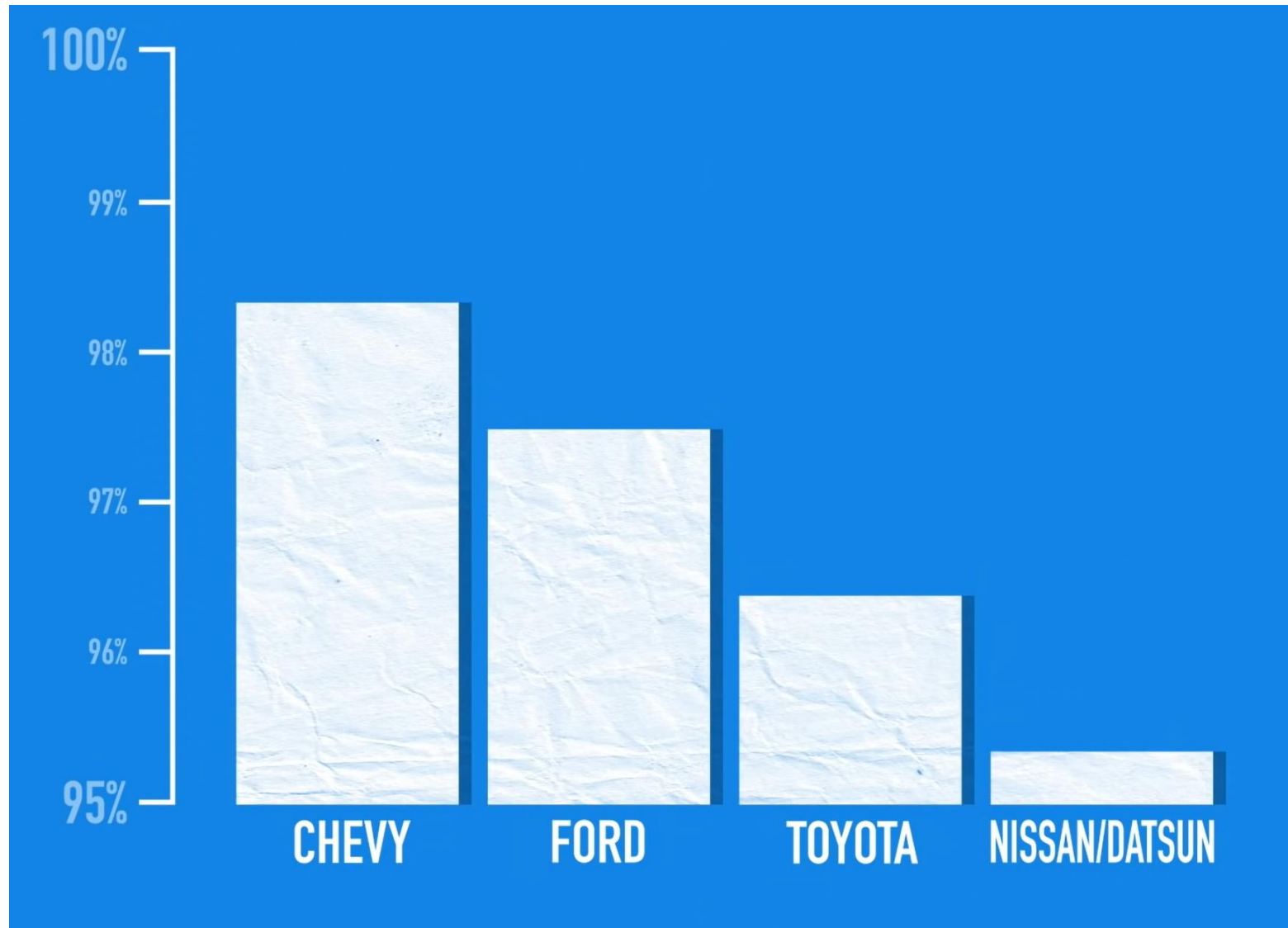
BCA
CAB

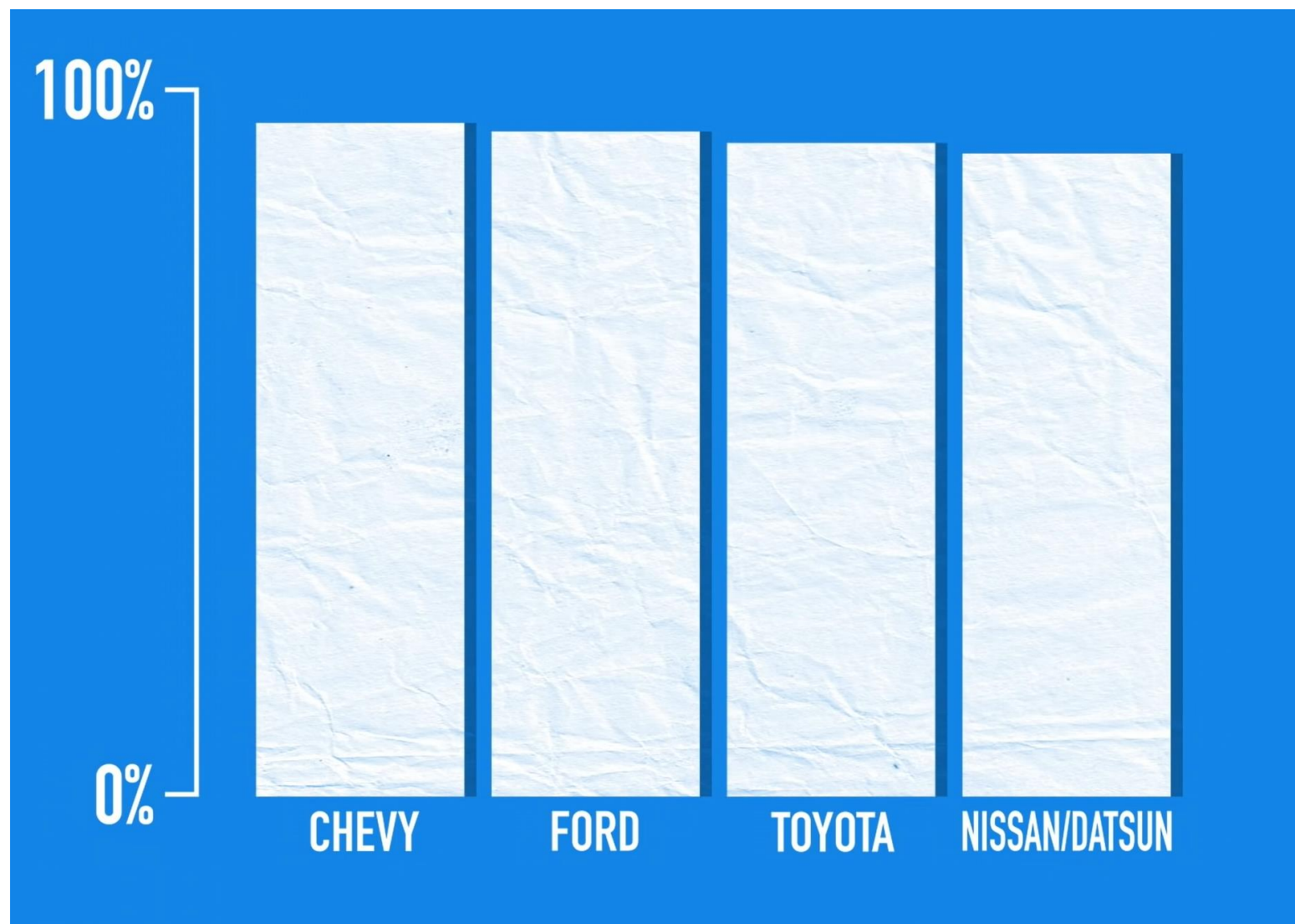
ACB
CBA
BAC





Comunicación
a través de
gráficos





JOB LOSS BY QUARTER

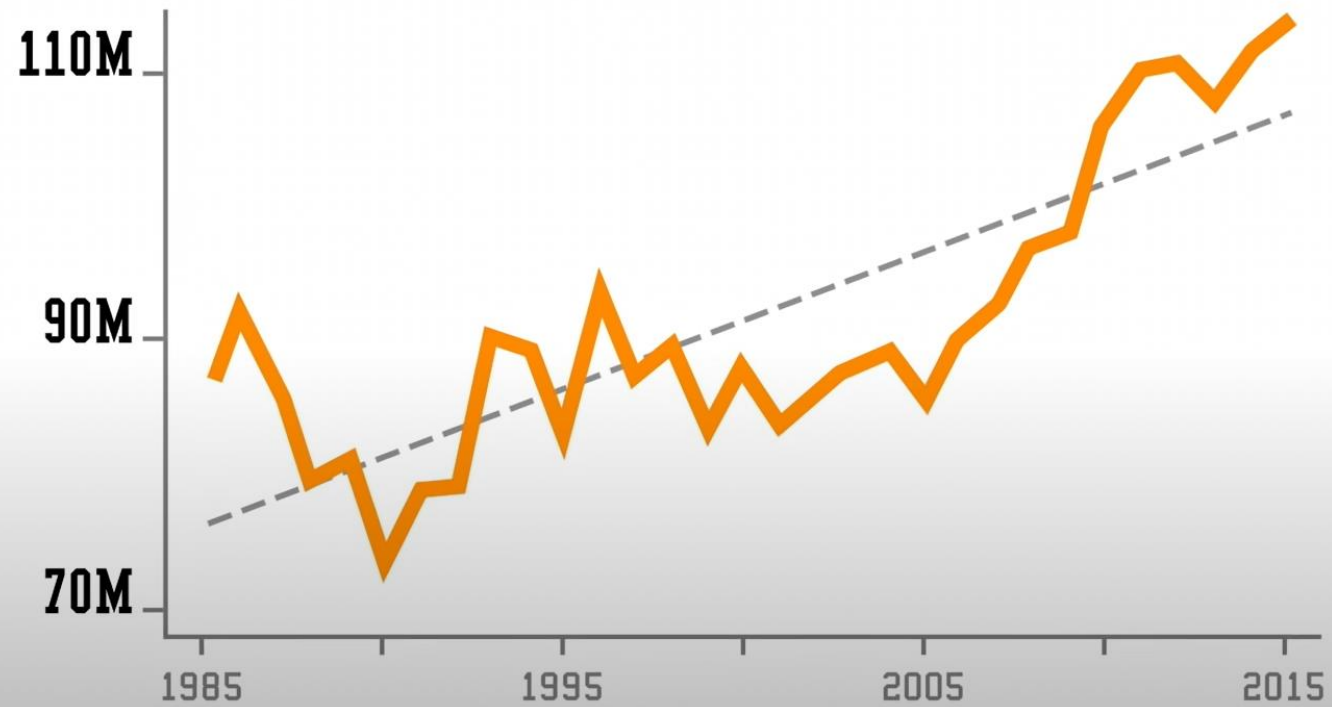


JOB LOSS BY QUARTER



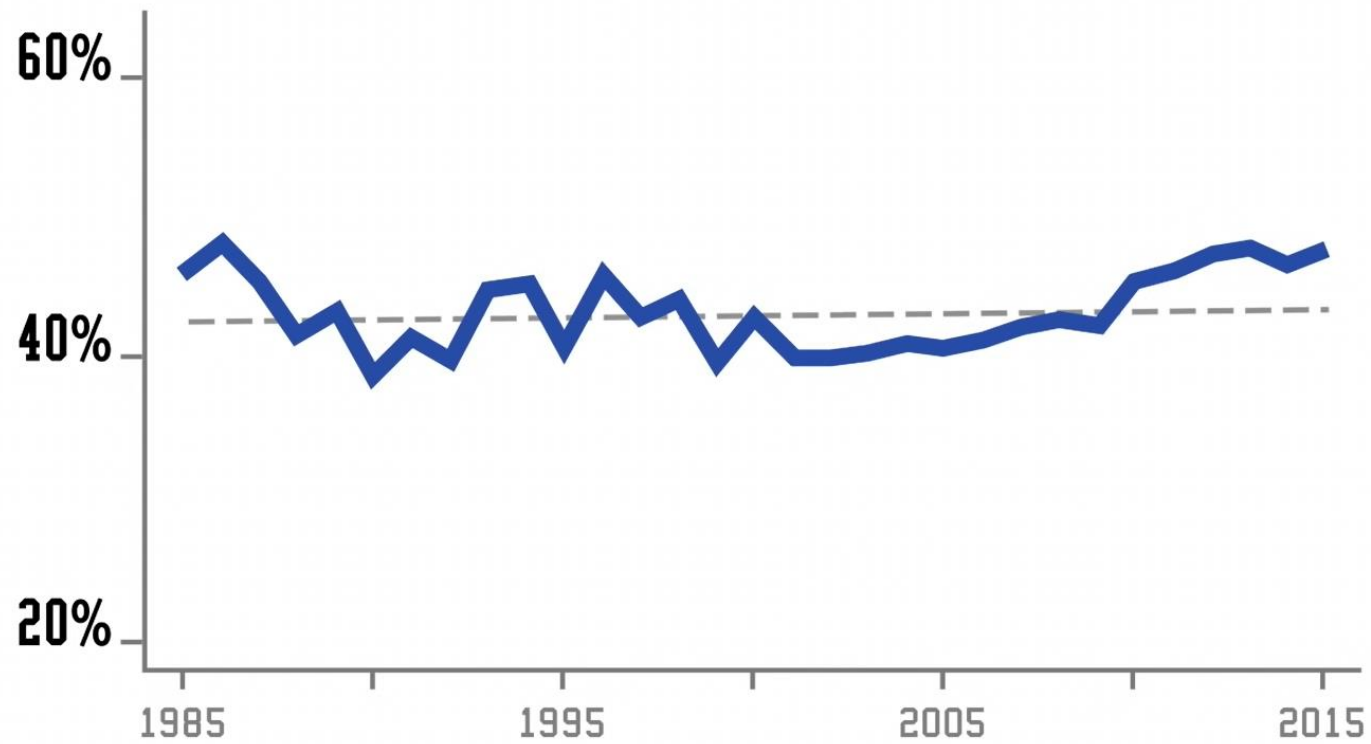
SUPER BOWL VIEWERSHIP

TOTAL IN MILLIONS



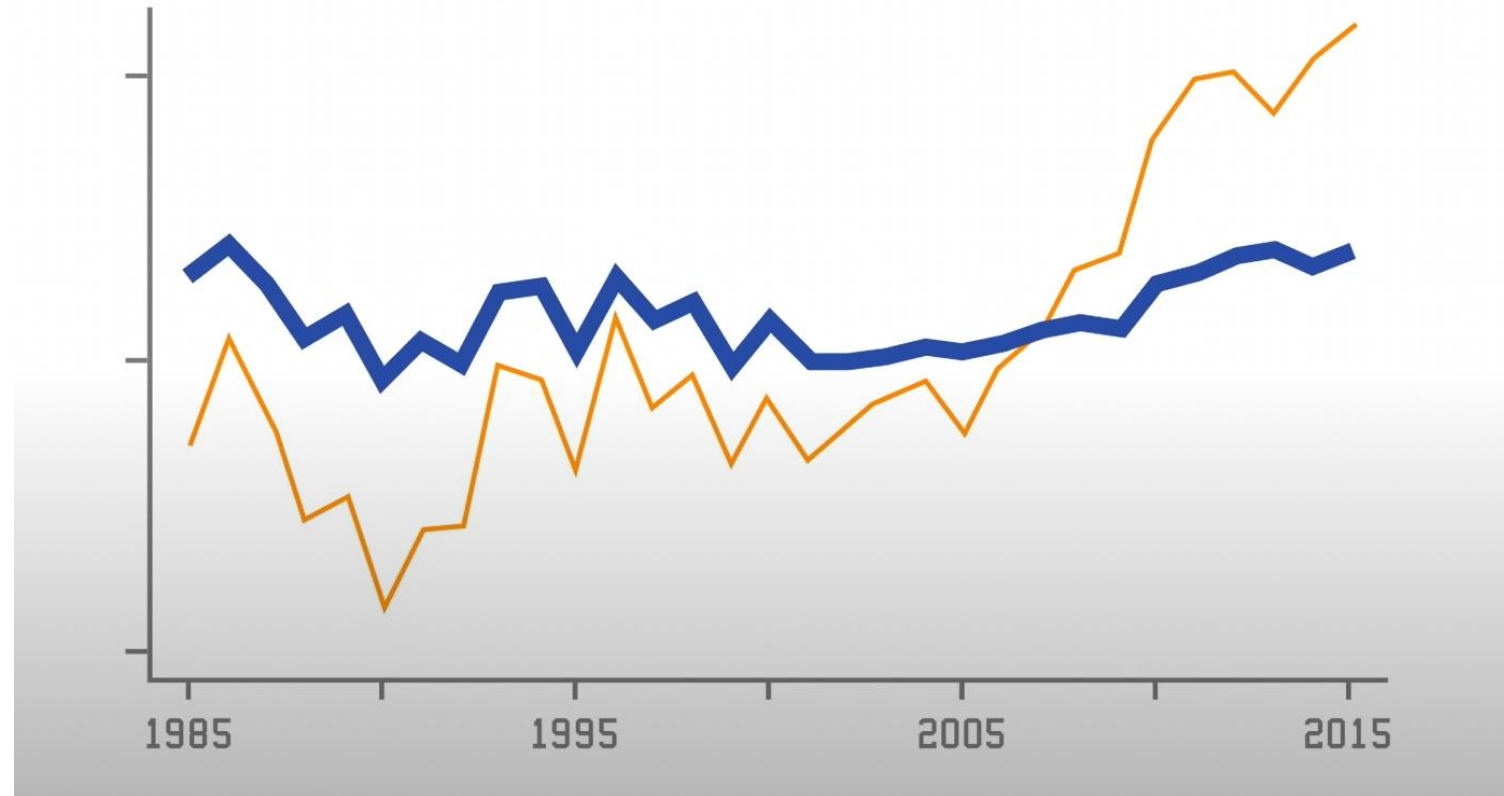
SUPER BOWL VIEWERSHIP

PERCENTAGE OF HOUSEHOLDS WITH TVS



SUPER BOWL VIEWERSHIP

PERCENTAGE OF HOUSEHOLDS WITH TVS
TOTAL IN MILLIONS



Datos importantes a extraer



Etiquetas



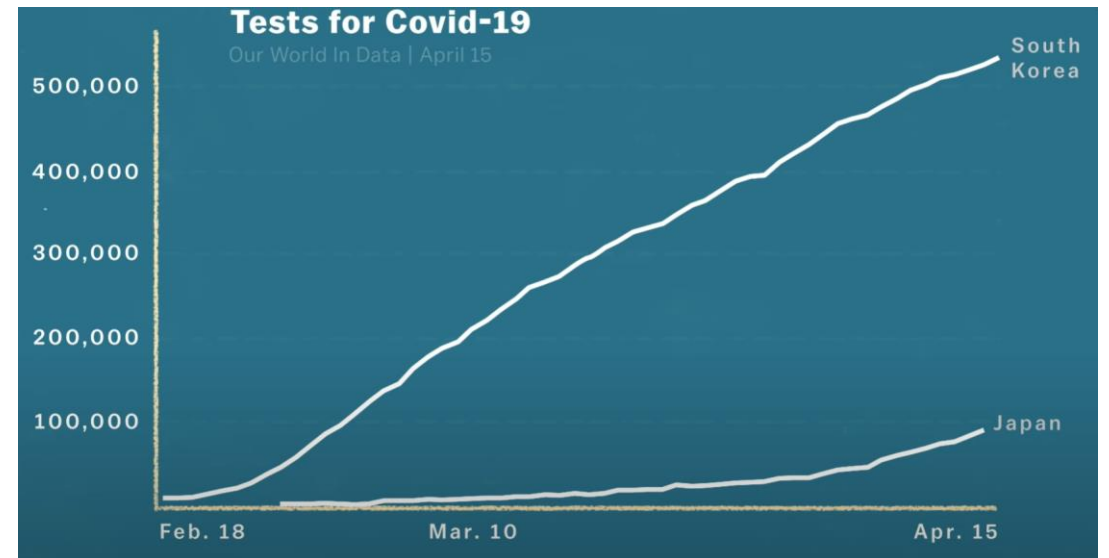
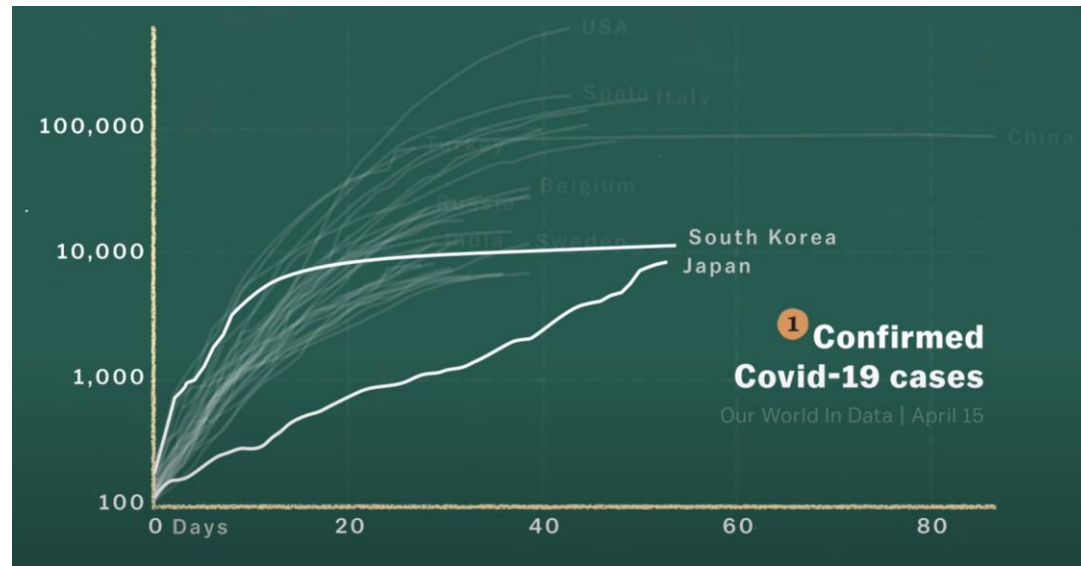
Escalas



Números



Contexto



Correlación vs Causalidad

$y = g(x)$

Secant Lines

Tangent Line T

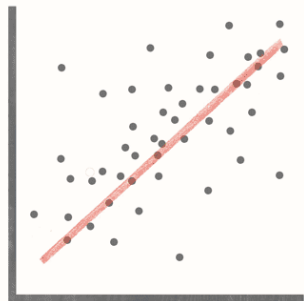
$x+h$

$$f'(x) = \lim_{h \rightarrow 0} \frac{f(x+h) - f(x)}{h}$$
$$f(x) = \lim_{h \rightarrow 0} \frac{(x+h)^2 - x^2}{h}$$
$$= \lim_{h \rightarrow 0} \frac{x^2 + 2xh + h^2 - x^2}{h}$$
$$= \lim_{h \rightarrow 0} \frac{2xh + h^2}{h}$$
$$= \lim_{h \rightarrow 0} h(2x + h)$$
$$= \lim_{h \rightarrow 0} g(x+h) - g(x)$$

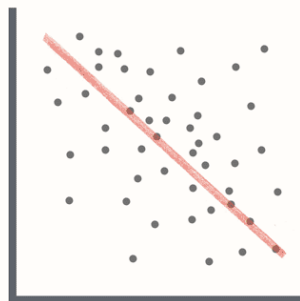
Definiciones

Una correlación es un indicador estadístico de la relación entre variables. Estas variables cambian juntas: covarían. Pero esta covariación no se debe necesariamente a un vínculo causal directo o indirecto.

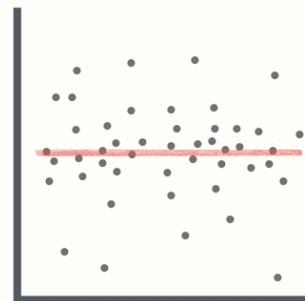
Causalidad significa que los cambios en una variable provocan cambios en la otra; existe una relación de causa y efecto entre las variables.



Positive Correlation



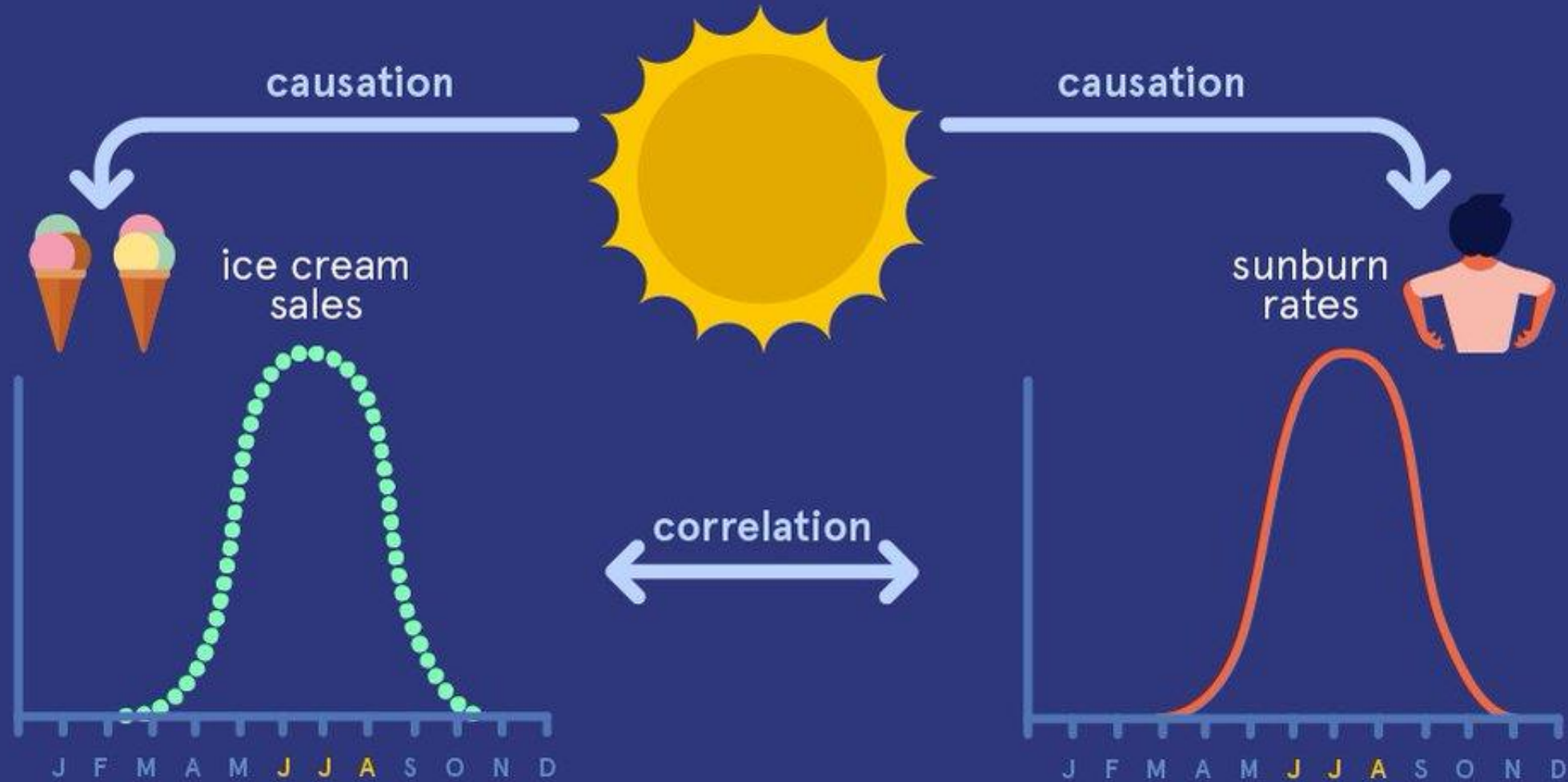
Negative Correlation



No Correlation



correlation does not imply causation

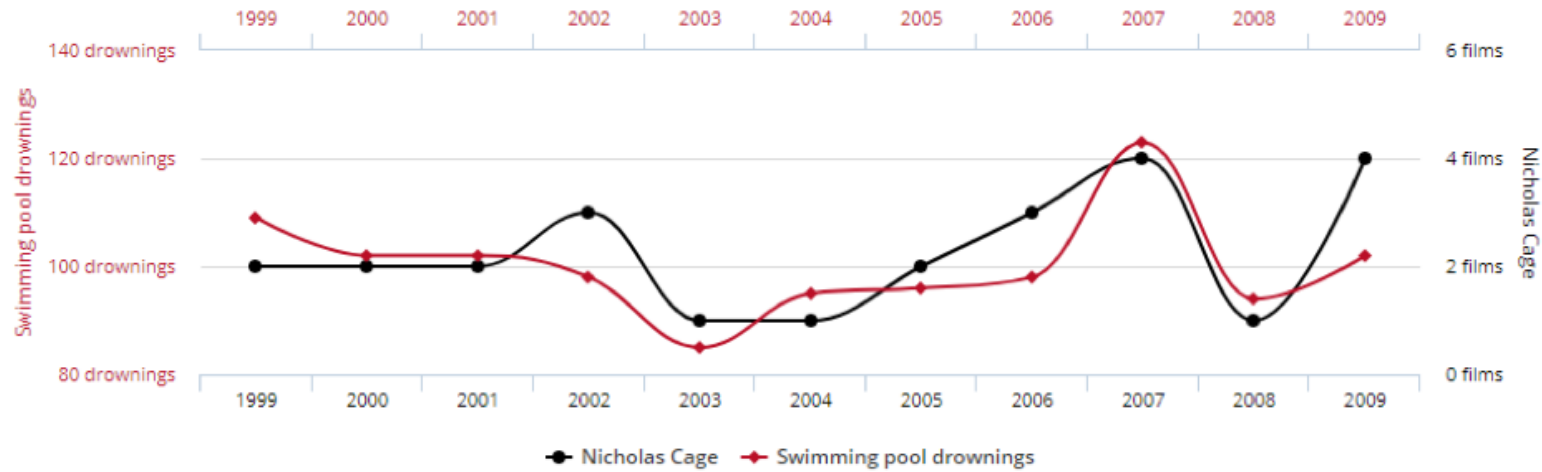


Number of people who drowned by falling into a pool

correlates with

Films Nicolas Cage appeared in

Correlation: 66.6% ($r=0.666004$)



Worldwide non-commercial space launches

correlates with

Sociology doctorates awarded (US)

