

## Exponential Decay

- nonlinear
  - form of  $y=ab^x$ , where  $a \neq 0$ ,  $0 < b < 1$
  - as  $x$  increases by one,  $y$  decreases by multiples of  $b$
  - the graph falls from left to right
  - a quantity decays exponentially - decreases by the same percent over equal periods of time
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- $y = a(1 - r)^t$
  - $a$  = initial amount
  - $r$  = decay rate
  - $1-r$  = decay factor
  - $t$  = time period