

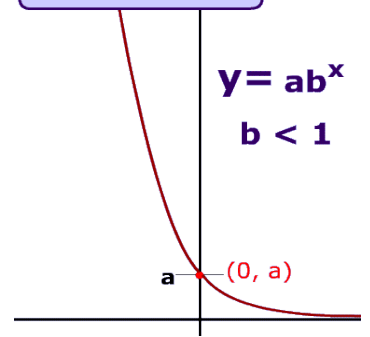
Exponential Decay Functions

* $y = ab^x$ for growth functions b is < 1

Exponential growth formula $y = a(1 - r)^t$

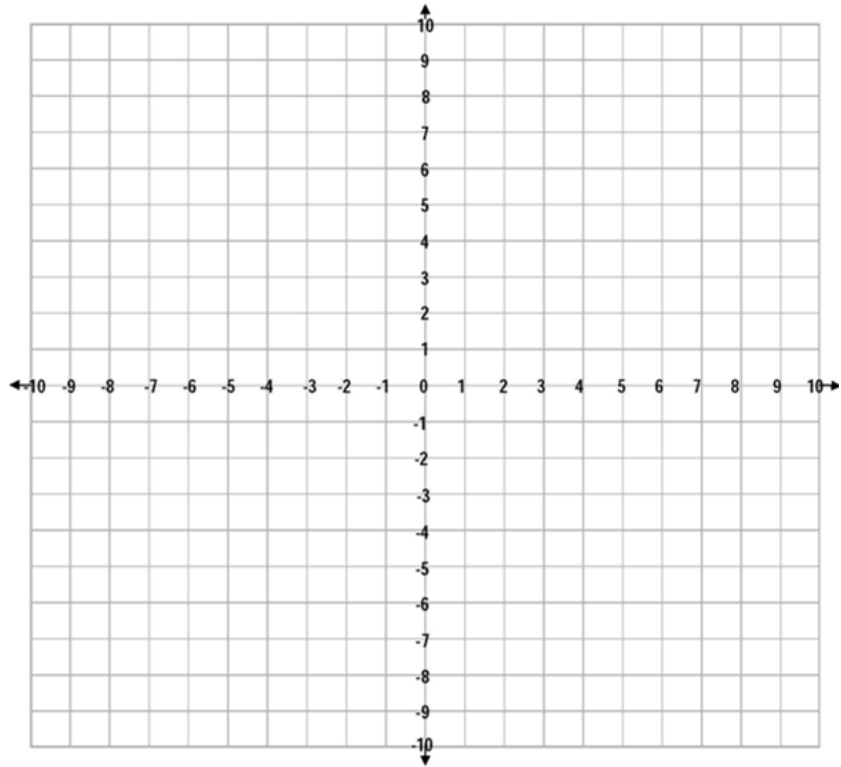
$a = \text{initial amount}$ $r = \text{decay rate}$ $t = \text{time period}$

Exponential Decay

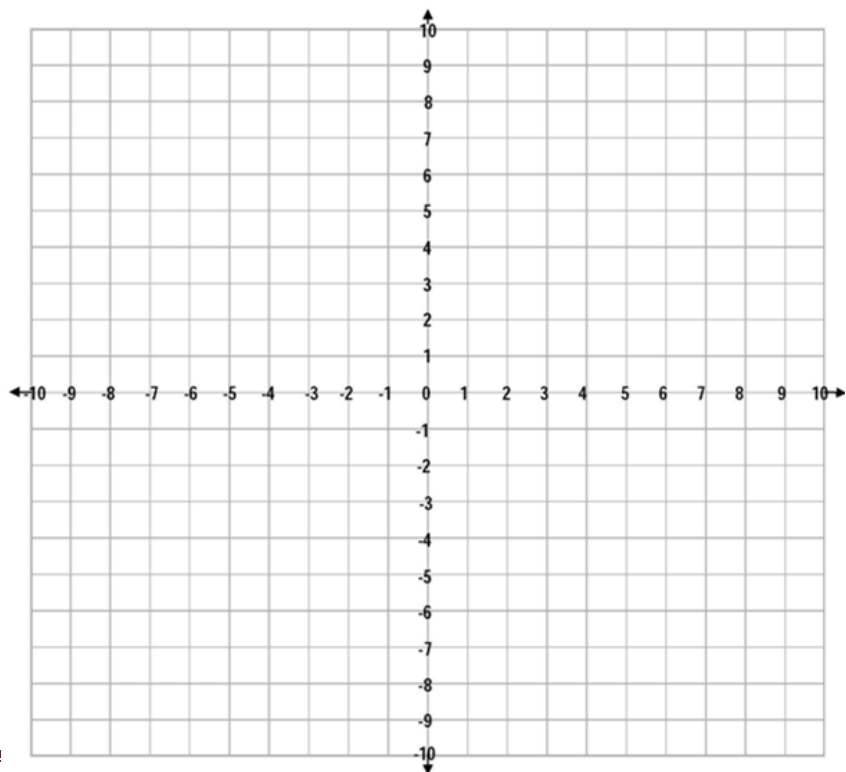


Fine initial amount (a) rate (r) and time (t) then Graph each

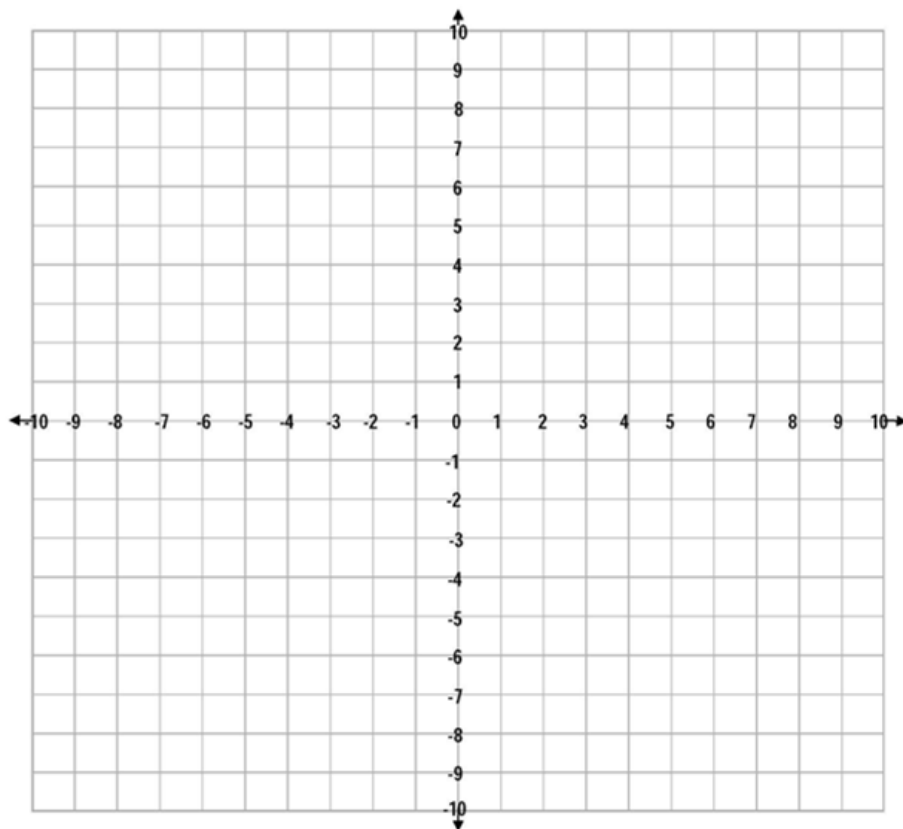
Ex1) $y = \frac{1}{2}^x$



Ex2) $y = 0.2^x$



$$\text{Ex3) } y = -2 \cdot \frac{1}{4}^x$$



$$\text{Ex4) } y = 3 \cdot \frac{1}{4}^x$$

