

Lesson 5-5 → Exponential Decay with

$$f(x) = a(1+r)^x$$

r = growth rate, which can be negative

You buy a boat for 200K.
It loses 1.5% of its value every month.

→ what is its value in 12 months?

$$200(1 - 0.015)^{12}$$

$$200(0.985)^{12} \approx 167$$

→ what is its value in 24 months?

$$200(0.985)^{24} \approx 139$$