

Lesson 5-4 → Exponential Growth with
 $f(x) = a(1+r)^x$

You Buy a house for 400K.
You expect it to increase in value
10% every year.

→ what is the value in 5 years?

$$400(1.1)(1.1)(1.1)(1.1)(1.1)$$

or

$$400(1.1)^5 \approx 644$$

→ what is the value in X years?

$$400(1.1)^x$$

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

a = initial amount

r = growth rate

x = number of time intervals