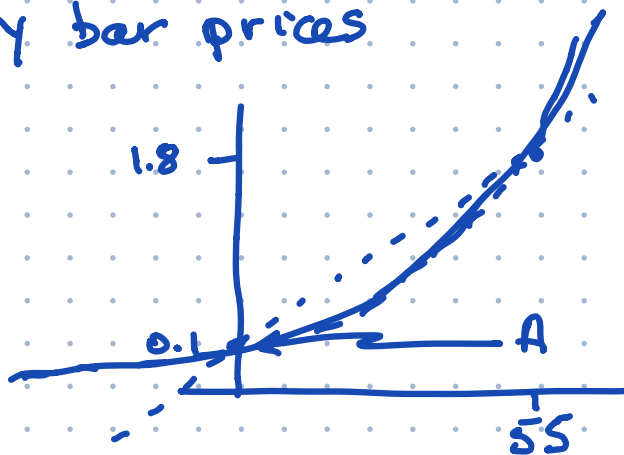


Candy bar prices

$(1965, \$0.10)$ ✓
 $(2020, \$1.80)$
 $2050 \dots ?$



① Choose form of model

$$y = Ab^x$$

② Fit the model

$$y = 0.1 b^x$$

$$\frac{1.8}{0.1} = b^{55}$$

$$18 = b^{55}$$

$$18^{1/55} = (b^{55})^{1/55}$$

$$\underbrace{1.0539\dots}_{(1+r)} = b$$

③ Model $y = 0.1 (1.053957592)^x$ $\uparrow$ yrs since '65

④ Use the model: $y = 0.1 (1.05\dots)^{\underbrace{2050-1965}_{85}}$

$$= \$8.71$$