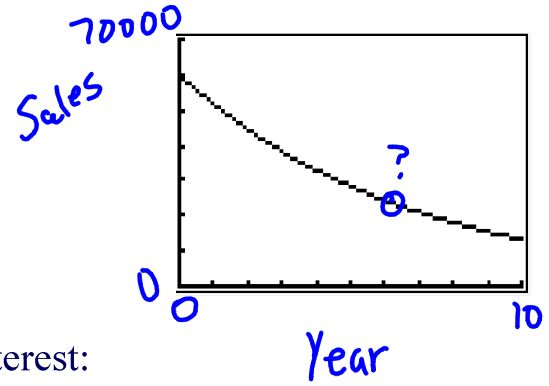
# Applications with e

Annual sales of a certain product can be modeled by the function $S = 60{,}000e^{-0.15t}$, where S is the number of units sold and t is the number of years since the product went on the market. Graph the model. Estimate the annual sales 6 years after the product went on the market.




$S(6) = 60{,}000e^{-0.15(6)}$

Year 6 Sales:
24,394 units

Continuously compounded interest:

$$A = Pe^{rt}$$

$3000 is deposited in an account that pays 3.5% annual interest compounded continuously. What is the balance after 3 years?

$A = 3000(e)^{.035 \cdot 3}$

$A = \$3332.13$