Quiz 11, Math 372

7/10/25

The value of a car is $35,000 when it is new, and falls to half of this value after 4.7 years.

a) Find an exponential model for the value of the car.
b) Find the value after 8 years.
c) When will the car be worth $2,000?

Hint: one option is to write $V(t) = A * e^{kt}$, and solve for k, using the given information. But there is a shortcut as well.

Ans:

a) V(t) = 35000(0.5)^(t/4.7)
b) $10,757
c) 19.4 years