

Multiple representations of Exponentials

Situation:

In 2019 Ms. Ramer bought a used car: a 2007 Toyota Prius for \$5,000.

- The value of the car will depreciate each year by approximately _____.
- In 2007, the car had a value of _____.
- If Ms. Ramer keeps her car until 2030, it will be worth about _____.
- The graph of this situation has an asymptote. That means that, theoretically, _____.

Equation:

$$y = ab^x$$

a = initial value

b = multiplier

Define variables:

Equation:

Table:

Time since Purchase (years)	Value of car (dollars)
0	5000
1	4600
2	4232
3	
4	3582
5	

Graph:

