

NAME:

UNIT 6 – POST-ASSESSMENT #2



Does the table represent a linear or exponential function?

x	-2	-1	0	1	2
y	81	27	9	3	1

$\div 3$

exponential decay

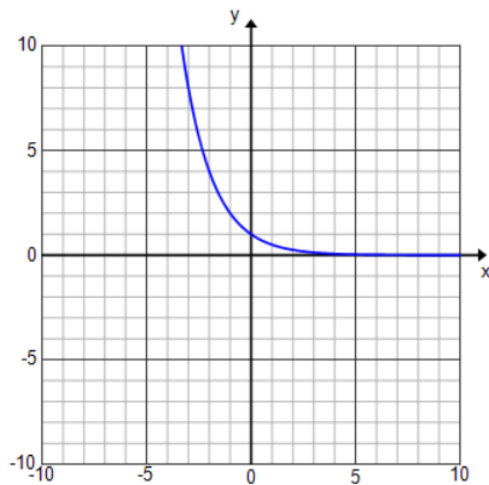
Does the following equation represent exponential growth or decay?

$y = 2 \cdot 3^x$ growth $y = -3 \cdot \left(\frac{1}{6}\right)^x$ decay

$y = \left(\frac{1}{4}\right)^{-x}$ growth $y = -4(7)^{-x}$ decay

State the Domain and Range of the Graph.

Domain: $(-\infty, \infty)$ Range: $(0, \infty)$



You buy a car for \$45,000. It depreciates at a rate of 4.6% each year. How much will the car be worth in 11 years?

$y = 45,000(1 - 0.046)^{11}$
\$26,806.78