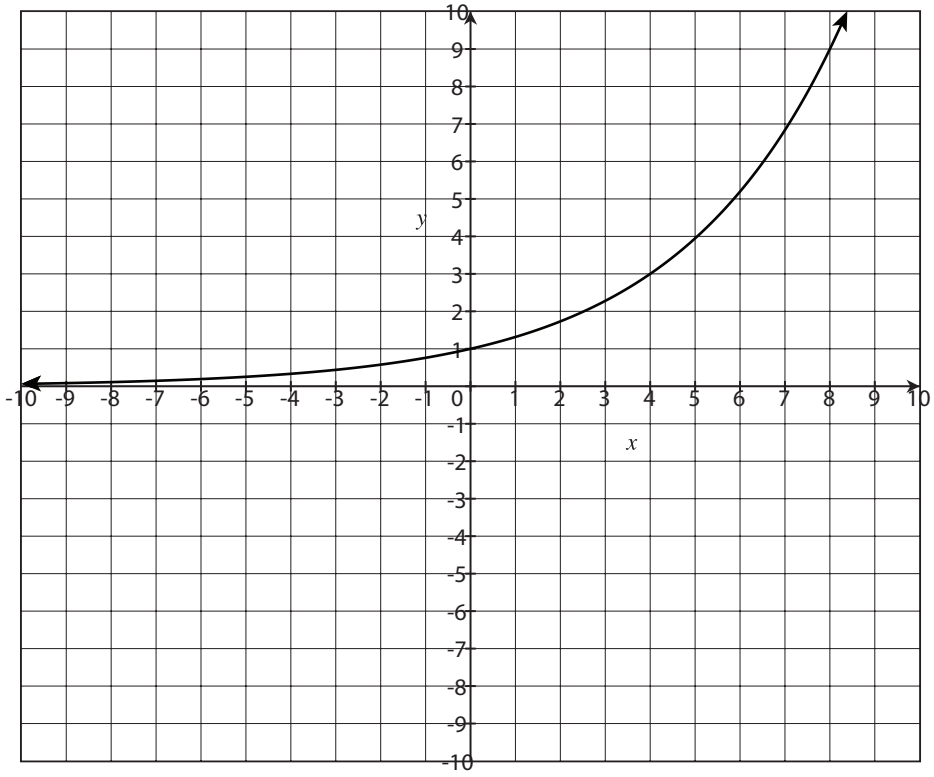
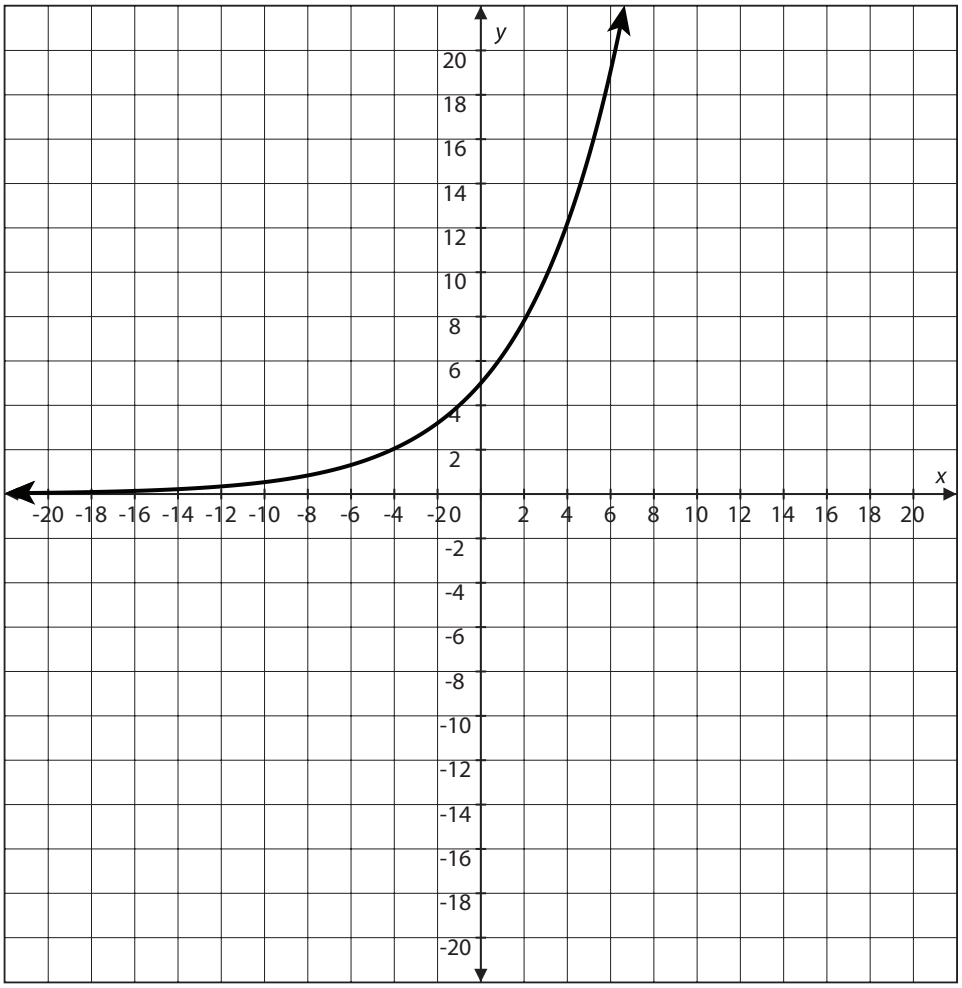
Evaluate $f(x) = 5(3^x) + 1$ for $x = 3$.

Given the graph below, what is $f(4)$?

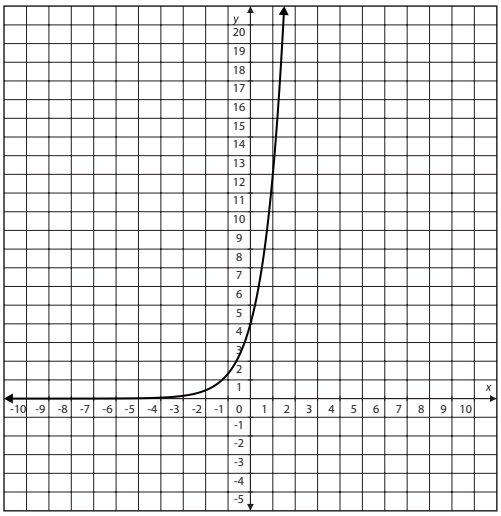


DeAndre modeled the growth of his ant population using the function $a(x) = 2(4)^{\frac{x}{3}}$, where x is in days. He started with 2 ants, and the population quadruples every 3 days. He evaluated the function at $f(12)$ and calculated $f(12) = 512$. What does his calculation say about the ant population?

The graph below can be described as:



What is the *y*-intercept of the graph below?



Describe the end behavior of $y = 2^x$.

What is the y-intercept of the graph of $f(x)=\frac{1}{4}(4)^x+2$?

A certain radioactive isotope has a half-life of 250 years. A scientist determines that there are 575 grams of the radioactive material present today. How much of the isotope was present 1,000 years ago?

Identify the parameters in the function $f(x)=4(3^x)$.

Ted owns a valuable baseball card that appreciates in value according to the function $f(x)=500(2^x)$. What are the parameters in this scenario?