

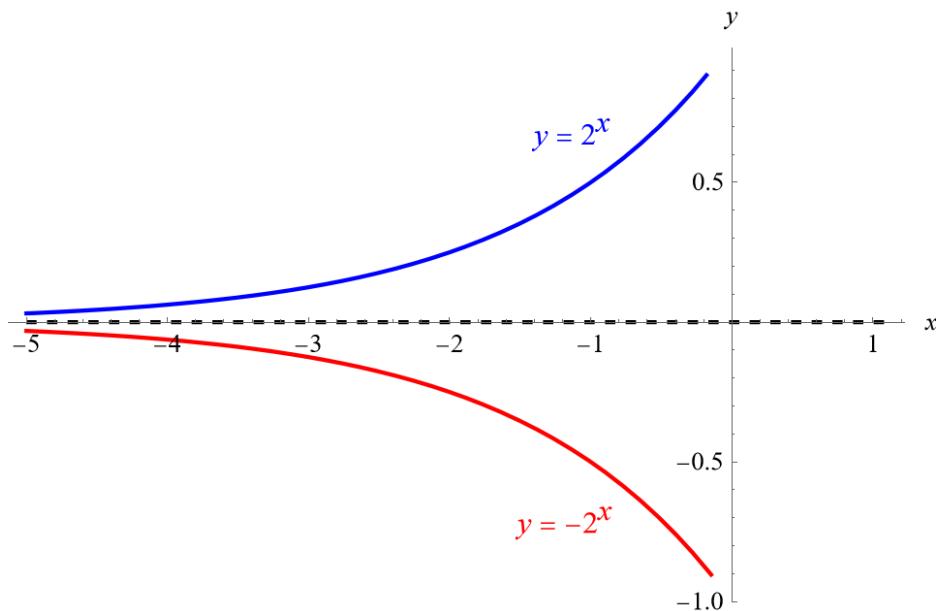
Exercise 240

For the following exercises, sketch the graph of the exponential function. Determine the domain, range, and horizontal asymptote.

$$f(x) = -2^x$$

Solution

Draw the parent function $y = 2^x$ and then draw the transformation $y = -2^x$.



Domain : $\{x \mid -\infty < x < \infty\}$

Range : $\{y \mid -\infty < y < 0\}$

Horizontal Asymptote : $y = 0$