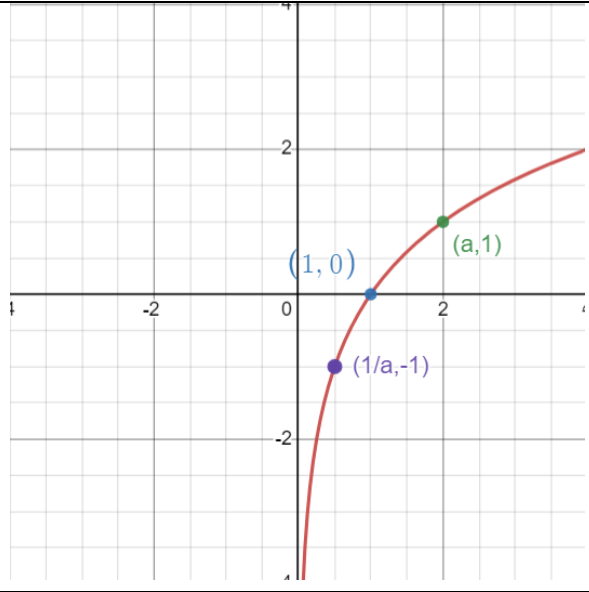
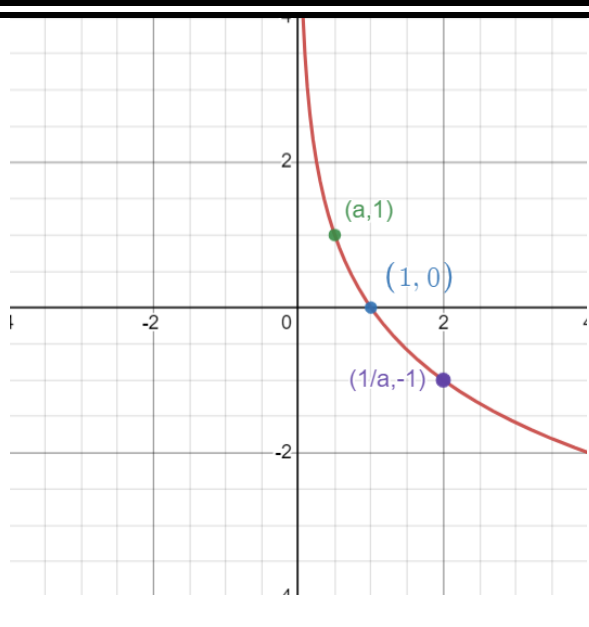


Logarithmic Function

$f(x) = \log_a x$ when $a > 1$	
<p>Domain: $(0, \infty)$; range: $(-\infty, \infty)$ x-intercept: $(1, 0)$ y-intercept: none vertical asymptote: $x = 0$ (<i>y</i>-axis) increasing one-to-one</p>	
$f(x) = \log_a x$ when $0 < a < 1$	
<p>Domain: $(0, \infty)$; range: $(-\infty, \infty)$ x-intercept: $(1, 0)$ y-intercept: non vertical asymptote: $x = 0$ (<i>y</i>-axis) increasing one-to-one</p>	