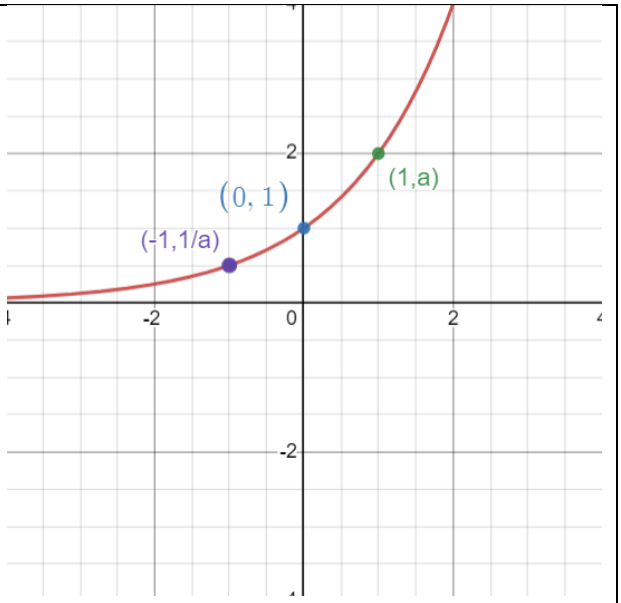
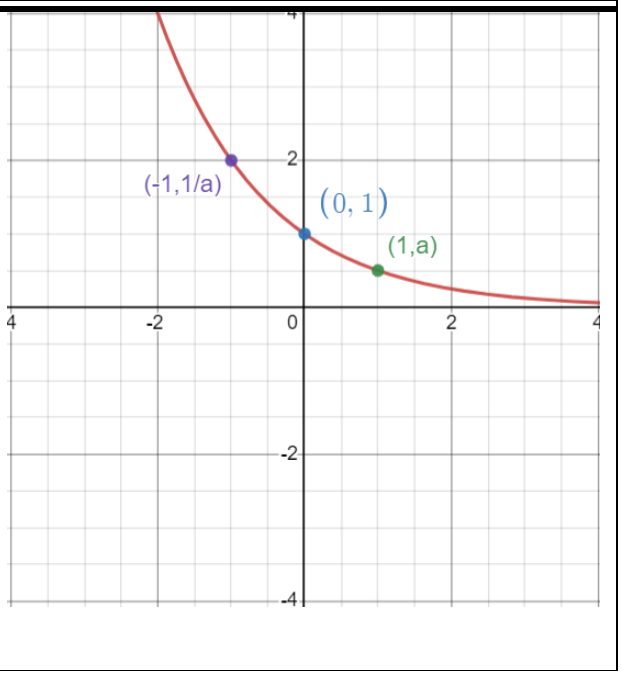
Exponential function

$f(x) = a^x \quad when\ a > 1$	
Domain: (-∞, ∞); range: (0, ∞) x-intercept: none y-intercept: (0,1) Horizontal asymptote: $\boldsymbol{y = 0\ \ (x - axis)}$ increasing one-to-one	
$f(x) = a^x \ \ when\ 0 < a < 1$	
Domain: (-∞, ∞); range: (0, ∞) x-intercept: none y-intercept: (0,1) horizontal asymptote: $\boldsymbol{y = 0\ \ (x - axis)}$ increasing one-to-one	