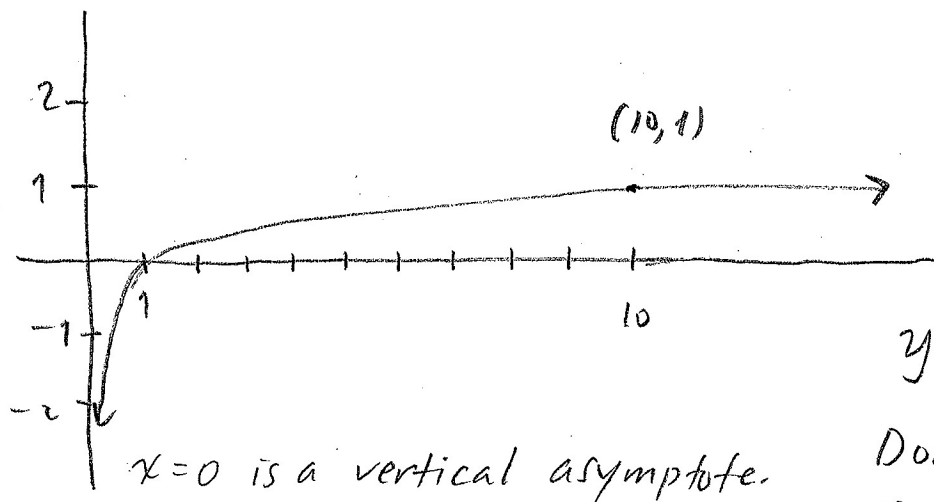


## RECAP



$$y = \log_{10} x$$

Domain:  $(0, \infty)$

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

Rules of logarithms:

$$\log_{10} (XY) = \log_{10} X + \log_{10} Y$$

$$\log_{10} \left( \frac{X}{Y} \right) = \log_{10} X - \log_{10} Y$$

$$\log_{10} (X^n) = n \log_{10} X$$

Works for  
any base  $b$ .