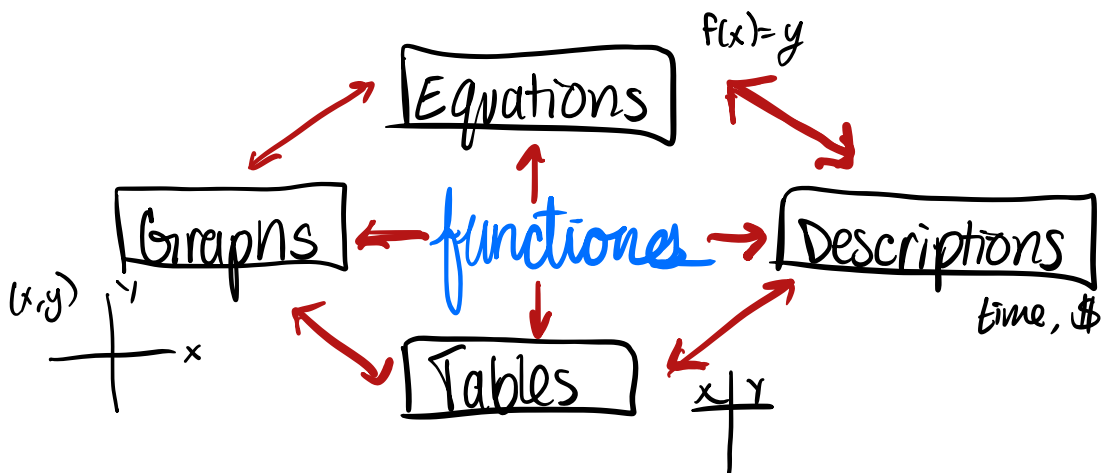


# Different kinds of functions

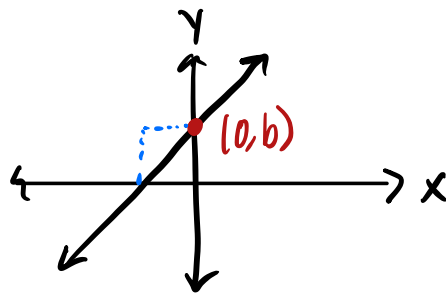


## Polynomials

① Linear functions

$$y = mx + b$$

have a constant slope.

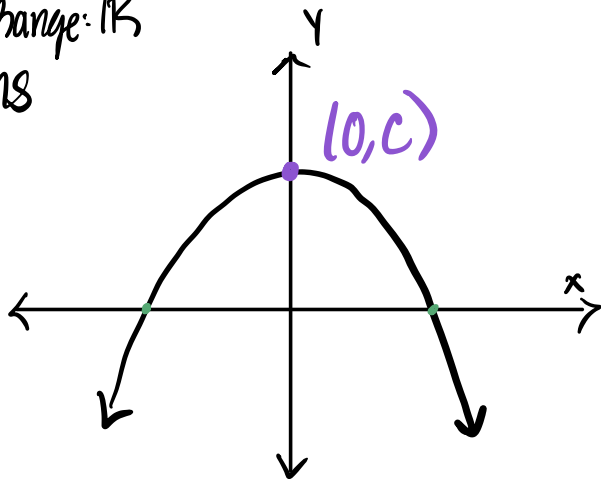


Domain:  $\mathbb{R}$  Range:  $\mathbb{R}$

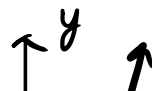
② Quadratic functions

$$y = ax^2 + bx + c$$

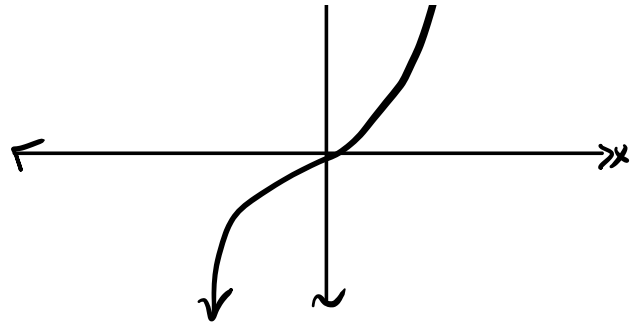
$$y = x^2$$



③ Cubic functions



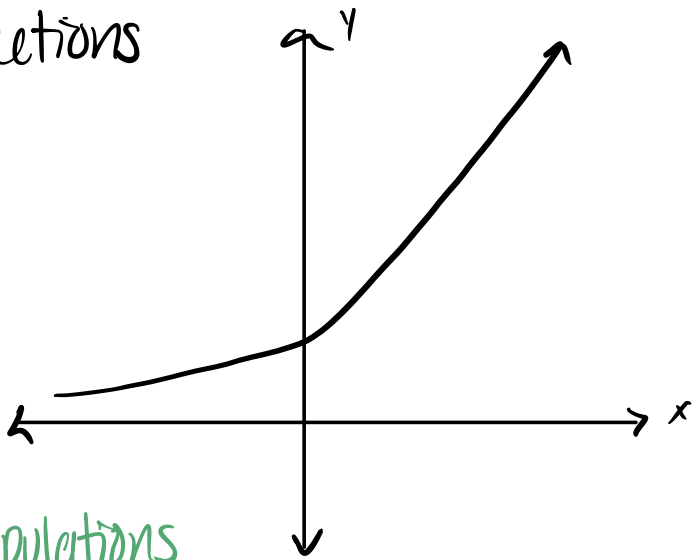
$$y = x^3$$



## Exponential functions

$$y = 2^x$$

$$y = e^x$$



- growth in populations
- growth / compounding interest of money.