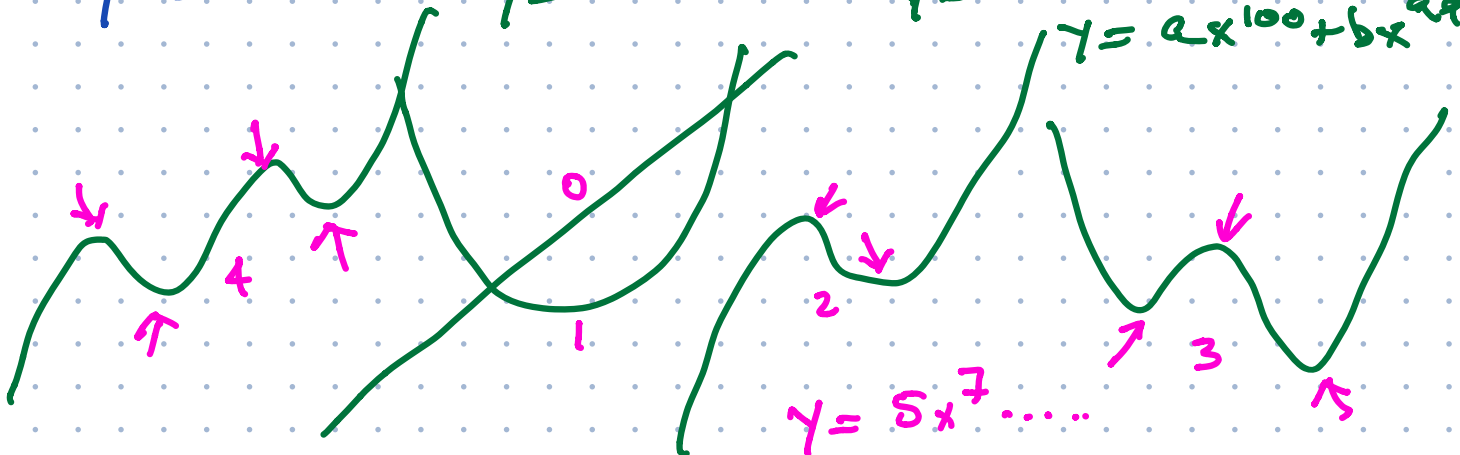


Three notable function families

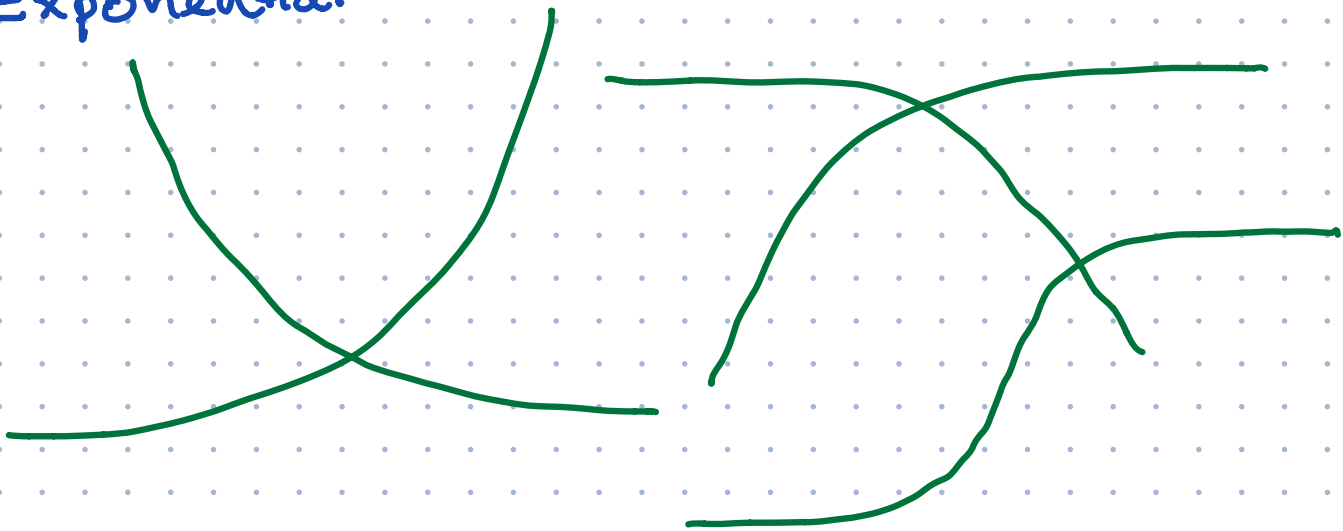
Polynomials

$$y = mx + b$$

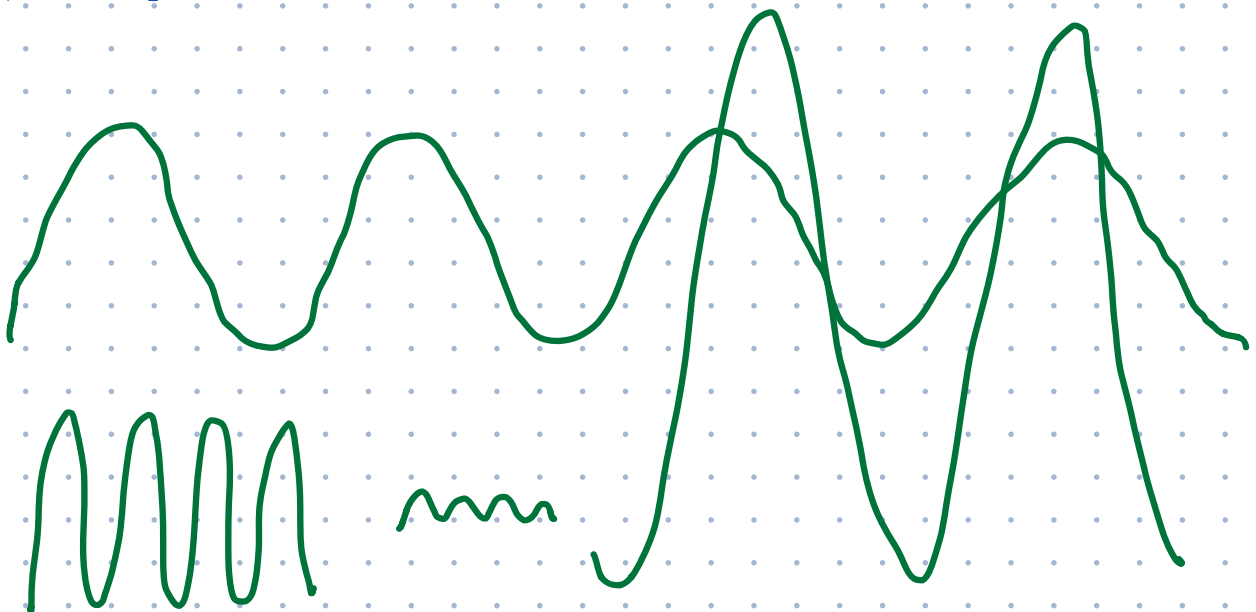
$$y = ax^2 + bx + c$$
$$y = ax^{100} + bx^{99} + \dots$$

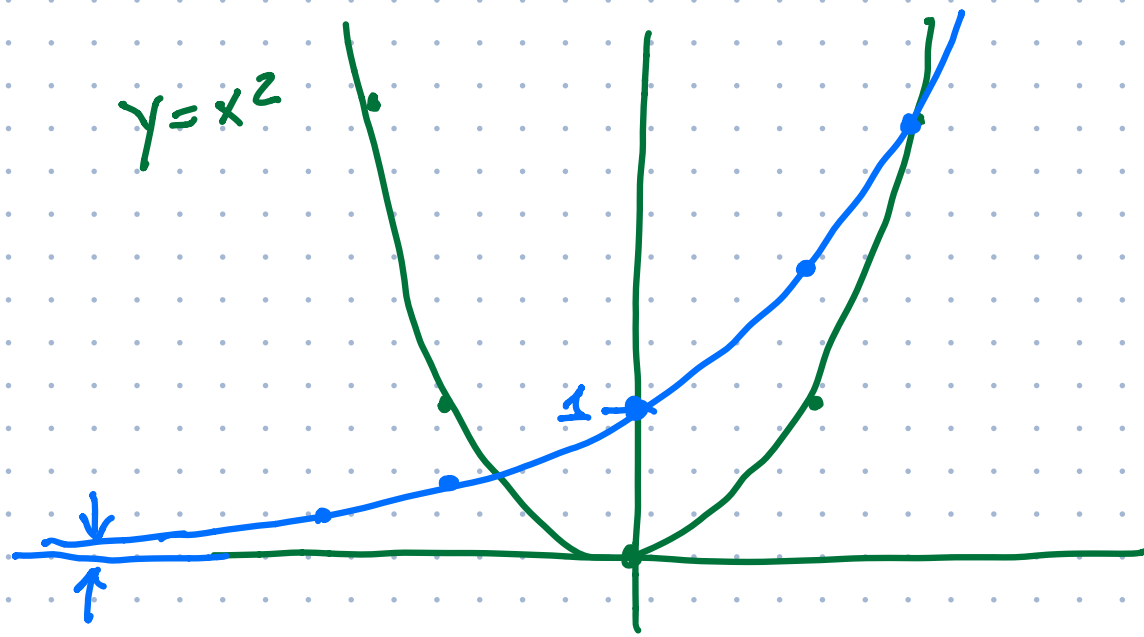


Exponential



Sinusoidal





$$y = 2^x$$

$$y = 2^{-1} = \frac{1}{2}$$

$$y = 2^{-2} = \frac{1}{2^2} = \frac{1}{4}$$

$$y = \text{"sine"} = \sin x$$

$$\text{cosine } x \rightarrow \cos x$$

