

# What is this special, unique curve?

~~The girl reading this~~  $f(x) = e^x$

# Calculus Break

a function  $f(x)$  takes  $x$  as input and produces a unique value  $y$  for each value of  $x$

the *derivative* of  $f(x)$  is a new function that you put  $x$  into and it gives you the rate of change of  $y$  as  $x$  increases (i.e. as you move from left to right in a graph)

we typically write this as  $f'(x)$

