

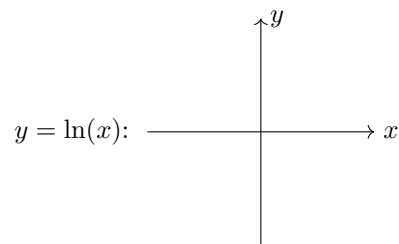
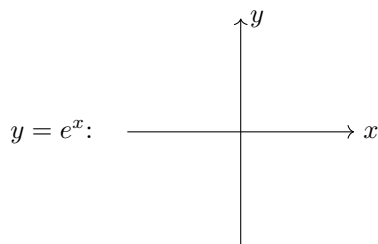
MATH 2A/5A Prep: Exponential and Logarithm Functions

Facts to Know:

e is the irrational number 2.718...

- $e^{a+b} =$ _____ , $e^{ab} =$ _____
- $\ln(ab) =$ _____ , $\ln(a^n) =$ _____
- $e^0 =$ _____ , $\ln(1) =$ _____ , $\ln(e) =$ _____
- For $x > 0$, $e^{\ln(x)} =$ _____ , $\ln(e^x) =$ _____

- Graphs:



Examples:

1. Determine whether $\ln(2) + \ln(3) - \ln(5)$ is positive or negative.

2. Order $e^3 \cdot e^3$, $e^{3 \cdot 3}$ and e^{3^3} from smallest to largest.