

Functions

- Graphs, Tables, equations
- Not every graph is a function (vertical line test)
- piecewise defined functions

Domain and intervals

- Remember: set of allowed values for a function.
- Be careful with
 - Square roots of negative numbers
 - Fractions with zero denominator
 - ...
- Intervals:
 - $[,]$
 - $(,)$
 - $(,]$
 - $[,)$

New functions from old functions

Basic arithmetic operations

- $f(x) \pm g(x)$: Domain intersection of domains
- $f(x) * g(x)$: Domain intersection of domains
- $f(x)/g(x)$: Domain intersection of domains with values that make $g = 0$ excluded

Composition of functions

- $(g \circ f)(x) = g(f(x))$

