

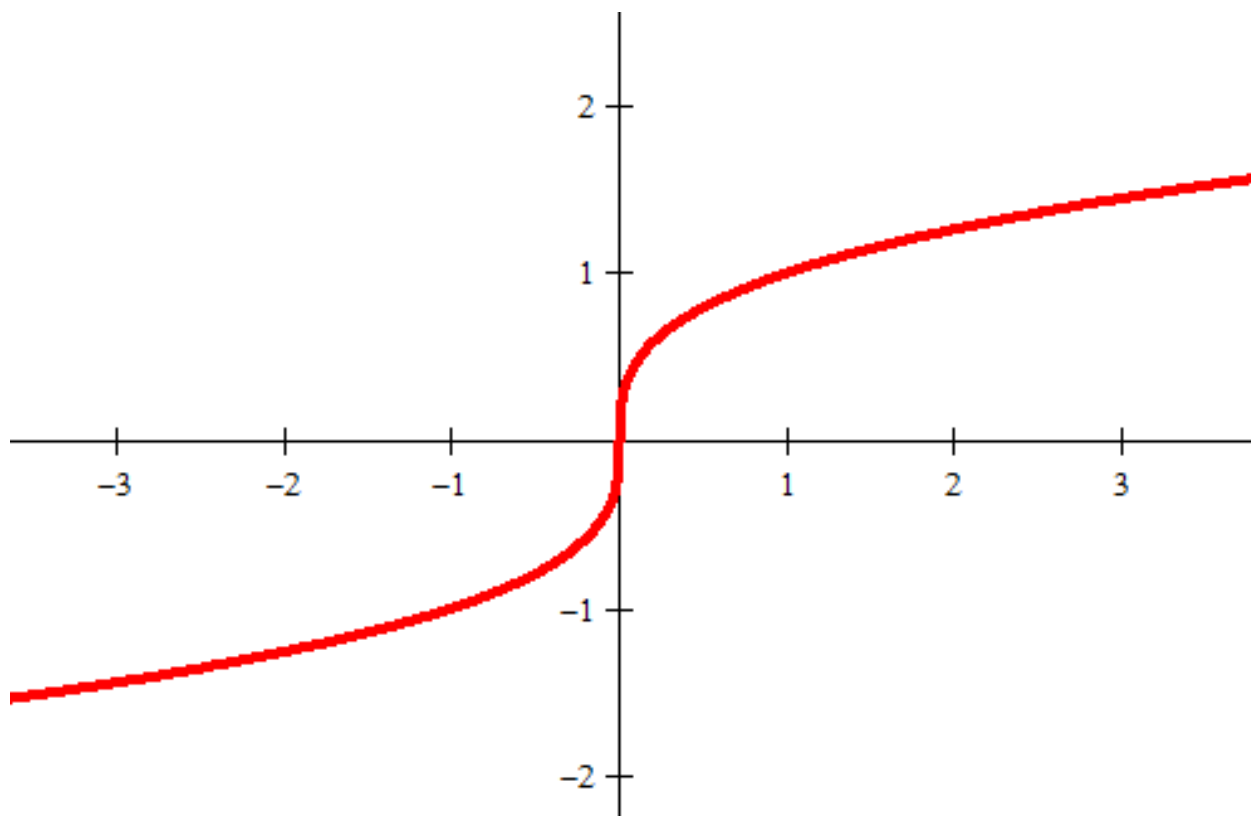
# Domain and Range

**Domain**: the set of x-values for a function

**Range**: the set of y-values for a function

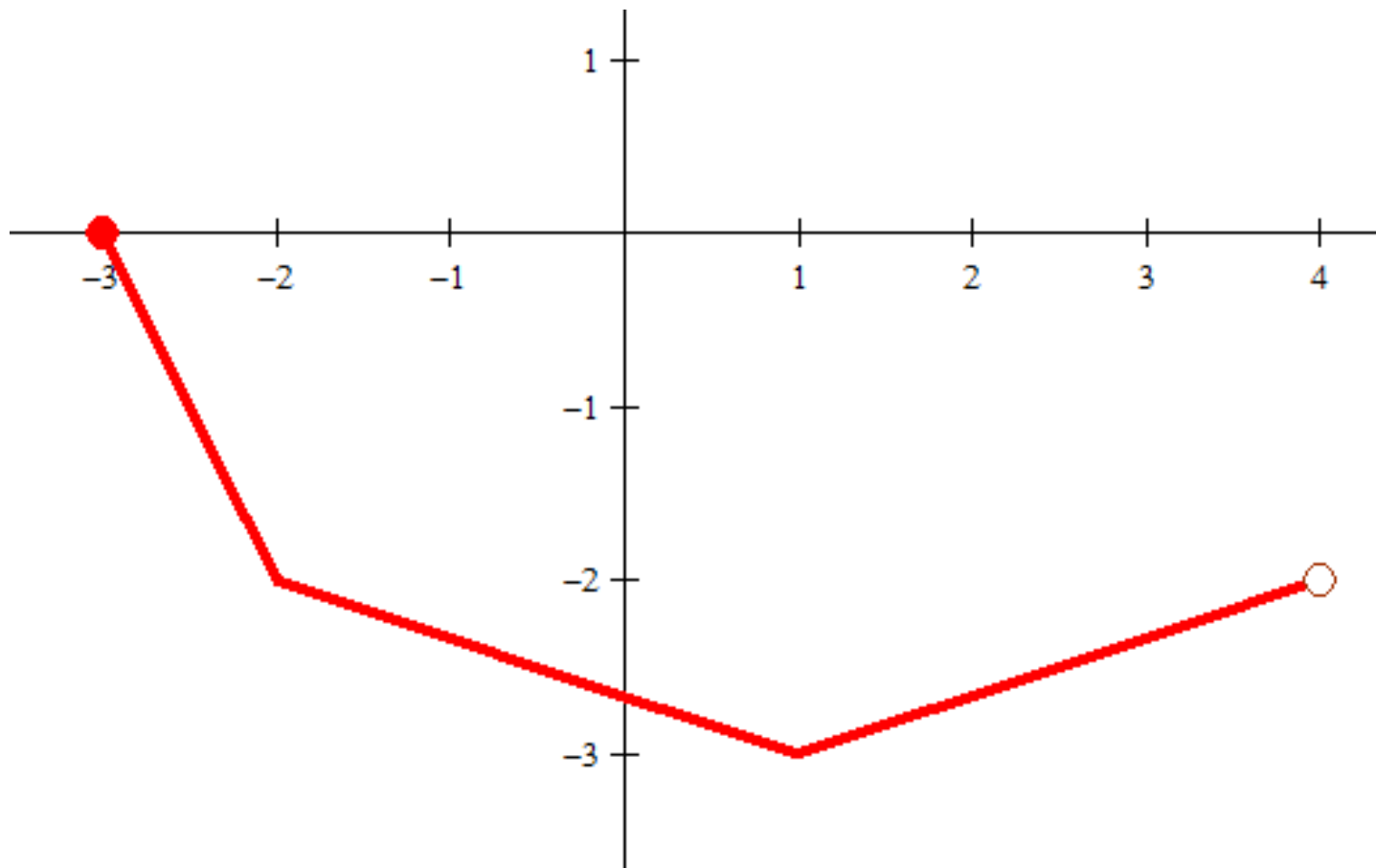
Domain:  $(-\infty, \infty)$

Range:  $(-\infty, \infty)$



Domain:  $[-3, 4)$

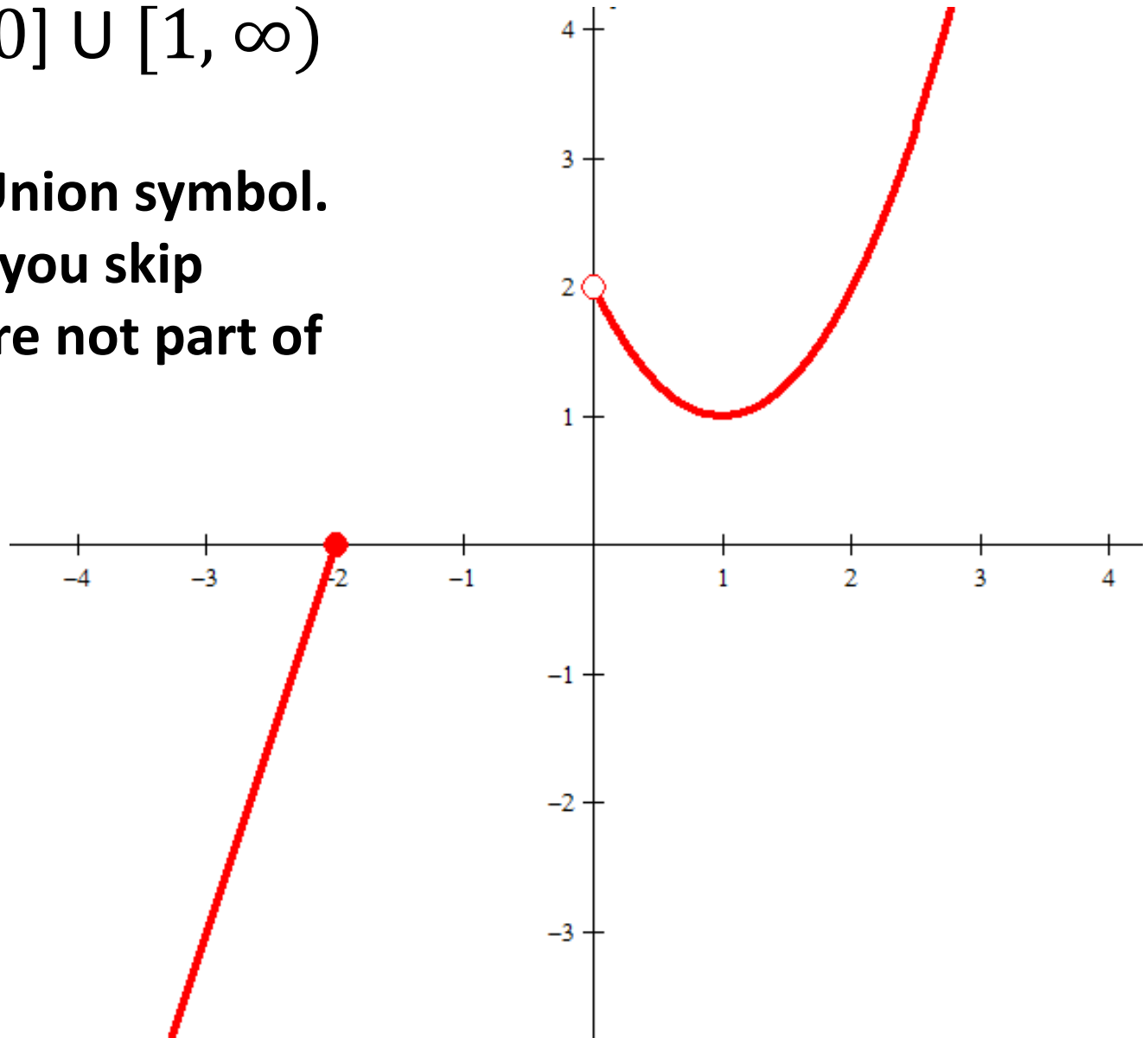
Range:  $[-3, 0]$



Domain:  $(-\infty, -2] \cup (0, \infty)$

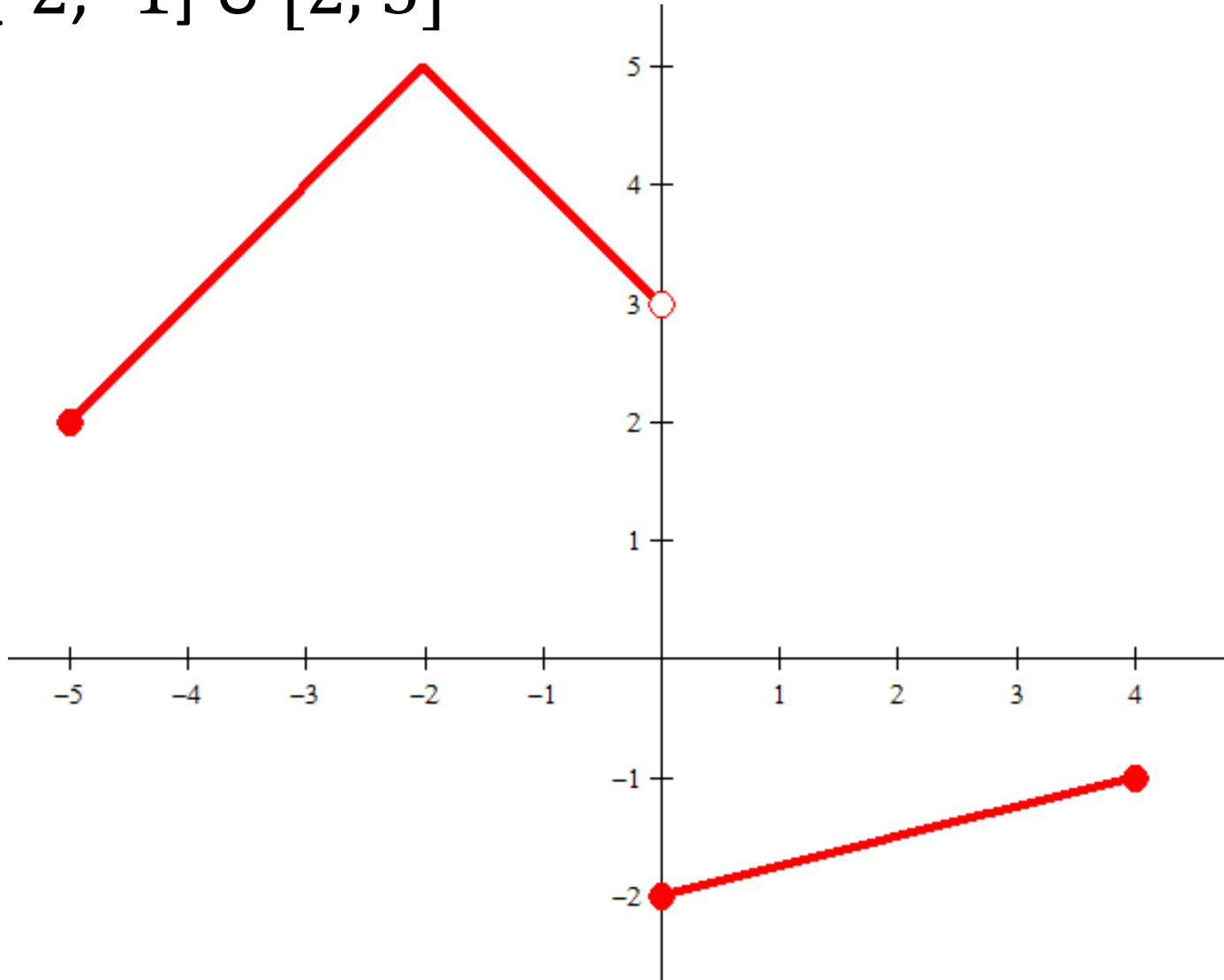
Range:  $(-\infty, 0] \cup [1, \infty)$

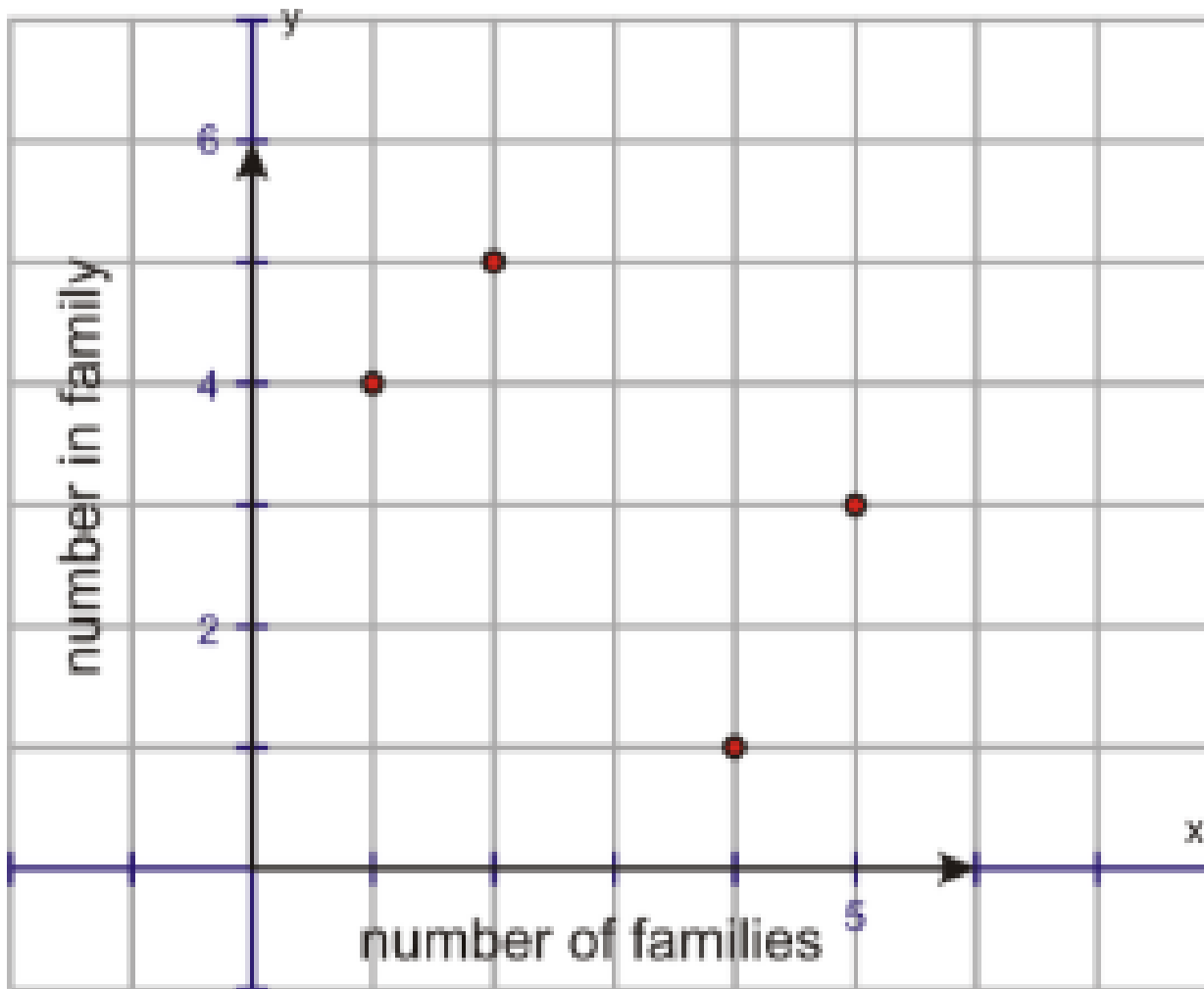
**The “U” is the Union symbol.  
It is used when you skip  
numbers that are not part of  
the interval.**



Domain:  $[-5, 4]$

Range:  $[-2, -1] \cup [2, 5]$





Domain:  $\{x \mid x = 1, 2, 4, 5\}$

Range:  $\{y \mid y = 1, 3, 4, 5\}$

**Use set notation for discrete graphs and data.**

Domain:  $\{x \mid x = -2, 0, 1, 3, 7\}$

Range:  $\{y \mid y = -4, -3, 2, 8\}$

x	f(x)
-2	-4
0	2
1	8
3	-3
7	2