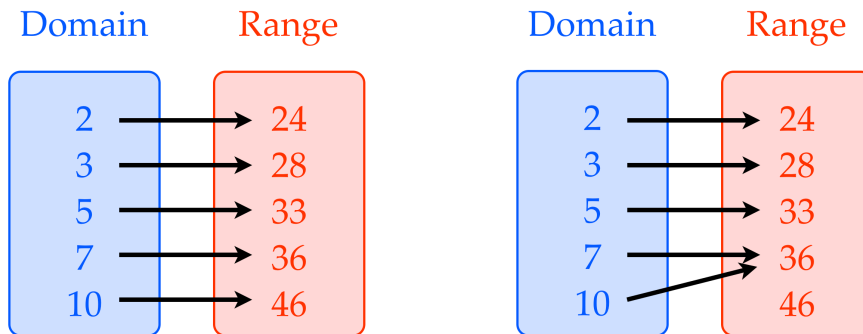


One-to-One Functions and the Vertical Line Test

Function $f(x)$ is said to be one-to-one if for every unique x value there exists and unique $f(x)$ value.

For every value in the domain, there exists a unique value in the range.

Mapping



Function $f(x)$ is said to be one-to-one if for every unique x value there exists and unique $f(x)$ value.

For every value in the domain, there exists a unique value in the range.

Ordered Pairs

$(-3, 4), (-1, 2), (0, -3), (2, -5), (4, -7)$

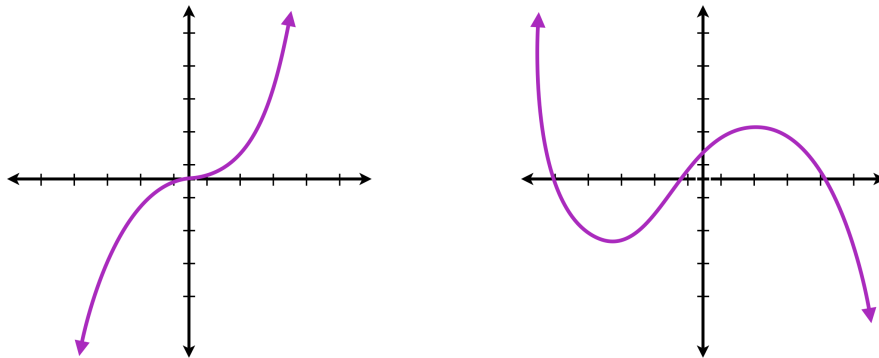
$(-2, 4), (0, 2), (1, -3), (3, 4), (5, -7)$

Function $f(x)$ is said to be one-to-one if for every unique x value there exists and unique $f(x)$ value.

For every value in the domain, there exists a unique value in the range.

Graphing $f(x)$

Use Horizontal Line Test

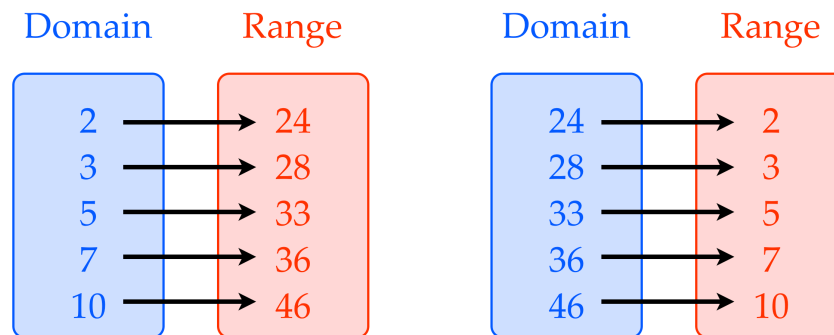


Function $f(x)$ is said to be one-to-one if for every unique x value there exists and unique $f(x)$ value.

For every value in the domain, there exists a unique value in the range.

If a function is one-to-one, then its inverse is also a function.

Mapping



Function $f(x)$ is said to be one-to-one if for every unique x value there exists and unique $f(x)$ value.

For every value in the domain, there exists a unique value in the range.

If a function is one-to-one, then its inverse is also a function.

Ordered Pairs

$(-3,4), (-1,2), (0,-3), (2,-5), (4,-7)$

$(4,-3), (2,-1), (-3,0), (-5,2), (-7,4)$

Function $f(x)$ is said to be one-to-one if for every unique x value there exists and unique $f(x)$ value.

For every value in the domain, there exists a unique value in the range.

If a function is one-to-one, then its inverse is also a function.