## State the domain and range of each relation.

| $\mathbf{x}$ | $\mathbf{y}$ |
| :---: | :---: |
| 2 | 3 |
| 5 | 5 |
| -3 | 5 |
| 3 | 4 |
| 3 | 3 |


| $x$ | $y$ |
| :---: | :---: |
| 5 | 2 |
| -2 | 12 |
| 6 | 54 |
| -23 | 9 |
| 2 | 6 |


| $x$ | $y$ |
| :---: | :---: |
| 34 | 3 |
| 2 | 7 |
| 3 | 8 |
| -25 | -5 |
| 8 | 44 |

Please Complete the table for each function and conduct the vertical line test for the function.


The Vertical Line Test

$$
Y=2 x^{2}+1
$$




## 3.6 - Function Notation

Function notation also defines the value of $x$ that is to be use to calculate the corresponding value of y .
$f(x)=2 x-5$
find $f(3)$.
find $f(-3)$.
$f(x)=4 x-1$
find $f(2)$.
find $f(-2)$.
$g(x)=x^{2}-2 x$
find $g(-3)$.
find $g(3)$.

## The Vertical Line Test

$X=Y^{2}-1$

| $\mathbf{x}$ | $\mathbf{y}$ |
| :---: | :---: |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |



## Domain and Range from Graphs

Find the domain and range of the function graphed to the right. Use interval notation.

## Domain:

Range:


## Domain and Range from Graphs

Find the domain and range of the function graphed to the right. Use interval notation.

Domain:
Range:


## Domain and Range from Graphs

Find the domain and range of the function graphed to the right. Use interval notation.

Domain:
Range:


