

---

---

# Library of Functions

---

---

# **1. Which 5 functions do not have All Real Numbers as their Domain?**

Square Root, Reciprocal, “Volcano”, Natural Log, Tangent

## 2. Which 2 functions have no negative numbers in their Domain?

Square Root, Natural Log

### **3. Which 4 functions have some type of discontinuity?**

Reciprocal, “Volcano”, Tangent, Greatest Integer

**4. Which 2 functions have a domain of all real numbers except zero?**

Reciprocal, “Volcano”

## **5. Which 3 functions are bounded above and below?**

Sine, Cosine, Logistic

## 6. Which 4 functions are EVEN?

Absolute Value, Squaring, “Volcano”, Cosine

## 7. Which 3 functions have vertical asymptotes at $x=0$ ?

Reciprocal, “Volcano”, Natural Log



## 8. Which 4 functions have horizontal asymptotes at $y=0$ ?

Reciprocal, “Volcano”, Exponential, Logistic

## 9. Which 5 functions are ODD?

Identity, Cubing, Cube Root, Reciprocal, Sine, Tangent

## 10. Which 6 functions increase on their entire domain?

Identity, Cubing, Cube Root, Exponential, Natural Log, Logistic

## 11. Which 4 functions have no zeros?

Reciprocal, “Volcano”, Exponential, Logistic

**12. Which 2 functions are identical except for a horizontal shift?**

Sine and Cosine

# **13. Which 5 functions have a range of all real numbers?**

Identity, Cubing, Cube Root, Natural Log, Tangent