**Trig/Precalculus Review Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Trigonometric Identities**

**Reciprocal Identities:**

sin $θ$ = cos $θ=$

csc $θ= $ sec $θ=$

tan $θ= $ cot $θ=$

**Quotient Identities** **Pythagorean Identities**

tan $θ= $

cot $θ= $

**Sum and Difference Identities** **Double Angle Identities**

cos ($α \pm β$) = sin 2$θ= $

sin ($α \pm β$) = cos 2$θ= $

tan ($α \pm β$) =

tan 2$θ= $

**Half-Angle Identities**

Sin $\frac{α}{2}$ =

Cos $\frac{α}{2}=$

Tan $\frac{α}{2}= $

**Exponential and Logarithmic Functions**

**Properties of Exponents:**

|  |  |  |
| --- | --- | --- |
| **Property** | **Definition** | **Example** |
| Product |  |  |
| Power of a Power |  |  |
| Power of a Quotient |  |  |
| Power of a Product |  |  |
| Quotient |  |  |

**Properties of Logarithms:**

|  |  |  |
| --- | --- | --- |
| **Property** | **Definition** | **Example** |
| Product |  |  |
| Quotient |  |  |
| Power |  |  |
| Equality |  |  |

**Change of Base Formula:**

**Natural Logarithms:**

**Factoring**

**Factoring Trinomials:**

**Factoring Perfect Square Trinomials:**

**Factoring Differences of Squares:**

**Solving Equations by Factoring:**