Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Trigonometry Ratios**

**Greek letter 🡪** *θ* **is pronounced “\_\_\_\_\_\_\_\_\_\_\_\_\_\_” and represents an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

|  |  |  |
| --- | --- | --- |
| **SINE** | **COSINE** | **TANGENT** |
| Pronounced: | Pronounced: | Pronounced: |
| *Sinθ* = $\frac{ }{ }$ | *Cosθ* = $\frac{ }{ }$ | *Tanθ* = $\frac{ }{ }$ |

**Example one:** Find the sine, the cosine, and the tangent of theta. Give a fraction.

*Sinθ* =

*Cosθ* =

*Tanθ* =

**Example two:** Find the sine, the cosine, and the tangent of theta.

*Sinθ* =

*Cosθ* =

*Tanθ* =

****Example three:** Find the sine, the cosine, and the tangent of angle A.

*SinA* =

*CosA* =

*TanA* =

****Example four:** Find the sine, the cosine, and the tangent of angle C.

*SinC* =

*CosC* =

*TanC* =

**Example five:** $Draw ∆ABC where$

**Example six:** $Draw ∆ABC where<ABC=90^{o}, $

$$AB=12, AC=13, BC=5 $$

1. What is Cos A?
2. What is Sin A?
3. What is Sin B?

$$<ABC= 90^{o}, AB=12,$$

$$ BC=9 and AC=15.$$

1. What is tan C?
2. What is Sin A?

**Example eight:** $Draw ∆HAT where<HAT= 90^{o}, $

$$HA=16, HT=20$$

1. What is the length of AT?
2. What is Cos T?
3. What is Tan H?

**Example seven:** $Draw ∆CAT where$

$$<ATC= 90^{o}, $$

$$CT=14, TA=48$$

1. What is the length of AC?
2. What is Cos A?
3. What is Tan C?

**Example ten:** $Which trig ratio is represented?$



1. Sin
2. Cos
3. Tan

**Example nine:** $Draw ∆BAT where$

$$<BTA= 90^{o}, BT=12, BA=15$$

1. What is the length of TA?
2. What is Sin B?
3. What is Sin A?