**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Right Triangle Trigonometry**



 



**In each diagram, identify the following:**

1.

1. Sin $Ѳ$ =
2. Cos $Ѳ$ =
3. Tan $Ѳ$ =



2.



1. Sin $A$ =
2. Cos $A$ =
3. Tan $A$ =

3.



Do you notice anything about the above answers?

1. Sin $B$ =
2. Cos $B$ =
3. Tan $B$ =
4. Sin $A$ =
5. Cos $A$ =
6. Tan $A$ =

4.

1. Sin $T$ =
2. Cos $T$ =
3. Tan $T$ =
4. Sin $C$ =
5. Cos $C$ =
6. Tan $C$ =



Do you notice anything about the above answers?

5.

 Do you notice anything about the above answers?

1. Sin $A$ =
2. Cos $A$ =
3. Tan $A$ =
4. Sin $C$ =
5. Cos $C$ =
6. Tan $C$ =

6.

1. Sin $T$ =
2. Cos $T$ =
3. Tan $T$ =
4. Sin $C$ =
5. Cos $C$ =
6. Tan $C$ =

 Do you notice anything about the above answers?

7. If Cos D = $\frac{7}{18}$ , what is the Sin of G?



8. If Cos $Ѳ$ = $\frac{9}{13}$ , what is the Sin of the missing angle?



9. If Sin $Ѳ$ = $\frac{6}{11}$, what is the Cos of the missing angle?



10.



11. In right triangle DOG with the right angle at O, sin D = 3x - .7 and cos G = 8x - 23. Determine and state the value of x. Explain your answer.

12. In right triangle HAT with the right angle at H, sin A = x + .2 and cos T = 7x - .1. Determine and state the value of x. Explain your answer.

13. In right triangle TOE with the right angle at O, sin T = 7x - .6 and cos E = 4x + 9 . Determine and state the value of x. Explain your answer.

14. In right triangle SAM with the right angle at A, sin S = 5x - .7 and cos M = 9x - .46 . Determine and state the value of x. Explain your answer.