7.5 Promethean Board Dynamic Activity Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Directions***: Complete the following practice problems. They are the same problems that will be completed on the board. Be sure to write each step down as we go!

1. Simplify the expression: $csc^{2}θ(1-cos^{2}θ)$
2. Simplify the expression: $cosθ+sinθtanθ$
3. Simplify the expression: $tan^{2}θ+sin^{2}θ+cos^{2}θ$
4. Simplify the expression: $cosθ sinθ secθ$
5. Simplify the expression: $cotθtanθ+ tan^{2}θ$
6. Simplify the expression: $\left(1-sinθ\right)\left(1+sinθ\right)$
7. Simplify the expression: $\frac{1-sin^{2}θ}{1-cos^{2}θ}$
8. Simplify the expression: $\frac{1}{sec^{2}θ}+\frac{1}{csc^{2}θ}$
9. Simplify the expression: $cosθsecθ- cos^{2}θ$
10. Simplify: $\left(1-sin^{2}θ\right)+\left(1-cos^{2}θ\right)-2$

**Practice:** Complete the following problems on your own!

1. Simplify the expression: $cosθ+sinθtanθ$
2. Simplify the expression: $tanθ\left(cotθ+tanθ\right)$
3. Simplify the expression: $sinθ\left(1+cot^{2}θ\right)$
4. Simplify the expression: $\frac{cscθ}{sinθ+cosθcotθ}$
5. Simplify the expression: $csc^{2}θ\left(1-cos^{2}θ\right)$
6. Simplify the expression: $\frac{cosθcscθ}{cotθ}$
7. Simplify the expression: $cscθcosθtanθ$
8. Simplify the expression: $sin^{2}θ+cos^{2}θ+tan^{2}θ$